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7.37 /home/amine/workspace/iRNA/irna/iRNA_pred/RanRNA.py File - Reference 247
7.38 /home/amine/workspace/iRNA/irna/iRNA_pred/Stat.py File Reference . . 248
7.39 /home/amine/workspace/iRNA/irna/iRNA_seq/Genbank.py File Reference248
7.40 /home/amine/workspace/iRNA/irna/iRNA_seq/iRNA_seq.py File - Reference 248
7.41 /home/amine/workspace/iRNA/irna/iRNA_seq/Sequences.py File - Reference 249
7.42 /home/amine/workspace/iRNA/irna/iRNA_seq/sRNA.py File Reference . 249
7.43 /home/amine/workspace/iRNA/irna/iRNA_stat/Analysis.py File Reference 249
7.44 /home/amine/workspace/iRNA/irna/iRNA_stat/Communication.py File - Reference 249
7.45 /home/amine/workspace/iRNA/irna/iRNA_stat/Computer.py File - Reference 250
7.46 /home/amine/workspace/iRNA/irna/iRNA_stat/Draw_data.py File - Reference 250
7.47 /home/amine/workspace/iRNA/irna/iRNA_stat/Ecdf.py File Reference . . 250
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7.50 /home/amine/workspace/iRNA/irna/iRNA_stat/iRNA_stat.py File Reference 251
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7.52 /home/amine/workspace/iRNA/irna/iRNA_stat/Pickling.py File Reference 252
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7.55 /home/amine/workspace/iRNA/irna/iRNA_stat/Regression.py File Reference 253
7.56 /home/amine/workspace/iRNA/irna/iRNA_stat/Soft.py File Reference . . 253
7.57 /home/amine/workspace/iRNA/irna/iRNA_stat/Threshold.py File Reference 253

Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

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irna::David2tulip::Edge . . . 11
irna::David2tulip::Files . . . 11
irna::David2tulip::Gene_list . . . 11
irna::David2tulip::Graph . . . 11
irna::David2tulip::Interact . . . 11
irna::David2tulip::Multilist . . . 12
irna::David2tulip::Mycarn_data . . . 12
irna::David2tulip::Name . . . 12
irna::David2tulip::Node . . . 12
irna::David2tulip::Parser . . . 12
irna::David2tulip::pValue . . . 12
irna::David2tulip::Similarity . . . 13
irna::David2tulip::Sqlite_manager . . . 13
irna::iRNA_pred . . . 13
irna::iRNA_pred::Comparison . . . 13
irna::iRNA_pred::Fasta . . . 13
irna::iRNA_pred::Files . . . 14
irna::iRNA_pred::Interaction . . . 14
irna::iRNA_pred::iRNA_pred . . . 14
irna::iRNA_pred::Merger . . . 15
irna::iRNA_pred::Mpi . . . 15
irna::iRNA_pred::Parse . . . 15
irna::iRNA_pred::RanRNA . . . 16
irna::iRNA_pred::Sqlite_manager . . . 16

irna::iRNA_pred::Stat 16
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irna::iRNA_seq::Genbank 17
irna::iRNA_seq::iRNA_seq 17
irna::iRNA_seq::Sequences 17
irna::iRNA_seq::sRNA 17
irna::iRNA_stat 18
irna::iRNA_stat::Analysis 18
irna::iRNA_stat::Communication 18
irna::iRNA_stat::Computer 18
irna::iRNA_stat::Draw_data 19
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irna::iRNA_stat::Execute 20
irna::iRNA_stat::Exp_data 20
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irna::iRNA_stat::iRNA_stat 20
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irna::iRNA_stat::NormScore 21
irna::iRNA_stat::Parser 22
irna::iRNA_stat::Pickling 22
irna::iRNA_stat::pValue 22
irna::iRNA_stat::pValue_selection 22
irna::iRNA_stat::Rand_data 22
irna::iRNA_stat::Regression 22
irna::iRNA_stat::Soft 23
irna::iRNA_stat::Sqlite_manager 23
irna::iRNA_stat::Threshold 23

Chapter 2

Class Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

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irna::iRNA_stat::Draw_data::draw_data . . . 43
irna::iRNA_stat::Interaction::Interaction . . . 90
irna::iRNA_stat::Regression::Regression . . . 169
irna::iRNA_stat::Communication::Communication . . . 26
irna::iRNA_pred::Comparison::Comparaison . . . 27
irna::iRNA_stat::Computer::Computer . . . 34
irna::David2tulip::Davidconfig::Davidconfig . . . 41
irna::iRNA_stat::Ecdf::Ecdf . . . 52
irna::David2tulip::Edge::Edge . . . 53
irna::David2tulip::Files::Files . . . 65
irna::iRNA_pred::Files::Files . . . 69
irna::iRNA_stat::Files::Files . . . 72
irna::iRNA_seq::Files::Files . . . 77
irna::iRNA_seq::Genbank::Genbank . . . 80
irna::David2tulip::Gene_list::Gene_list . . . 82
irna::David2tulip::Graph::Graph . . . 84
irna::iRNA_pred::Interaction::Interaction . . . 97
irna::iRNA_pred::Merger::Merger . . . 103
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irna::iRNA_pred::Parse::Parse . . . 134
irna::iRNA_stat::Parser::Parser . . . 147
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irna::iRNA_stat::Exp_data::Exp_data . . . 58
irna::iRNA_stat::pValue_selection::pValue_selection . . . 158
irna::iRNA_stat::Rand_data::Rand_data . . . 163

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irna::iRNA_stat::Threshold::Threshold 234
irna::David2tulip::Parser::Parser 149
irna::David2tulip::David::David 38
irna::David2tulip::Interact::Interact 88
irna::David2tulip::Multilist::Multilist 118
irna::David2tulip::Mycarn_data::Mycarn_data 122
irna::David2tulip::Name::Name 125
irna::David2tulip::pValue::pValue 156
irna::David2tulip::Similarity::Similarity 177
irna::iRNA_stat::Pickling::Pickling 153
irna::iRNA_stat::pValue::pValue 154
irna::iRNA_pred::RanRNA::RanRNA 166
irna::iRNA_seq::Sequences::Sequences 172
irna::David2tulip::Sqlite_manager::Sqlite_manager 181
irna::iRNA_pred::Sqlite_manager::Sqlite_manager 197
irna::iRNA_stat::Sqlite_manager::Sqlite_manager 213
irna::iRNA_seq::sRNA::sRNA 229
irna::iRNA_pred::Stat::Stat 231
irna::iRNA_pred::Fasta::Fasta 61

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

irna::iRNA_stat::Analysis::Analysis . . . 25
irna::iRNA_stat::Communication::Communication
: Empty object used for mpi communication . . . 26
irna::iRNA_pred::Comparison::Comparaison
: Create coupled files and the list of comparison . . . 27
irna::iRNA_stat::Computer::Computer . . . 34
irna::David2tulip::David::David . . . 38
irna::David2tulip::Davidconfig::Davidconfig . . . 41
irna::iRNA_stat::Draw_data::draw_data . . . 43
irna::iRNA_stat::Ecdf::Ecdf . . . 52
irna::David2tulip::Edge::Edge
: Handle interaction . . . 53
irna::iRNA_stat::Execute::Execute . . . 56
irna::iRNA_stat::Exp_data::Exp_data . . . 58
irna::iRNA_pred::Fasta::Fasta
: Write fasta needed for the different software from a multifasta . . . 61
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irna::iRNA_pred::Files::Files
: . . . 69
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: Handle DAVID enrichment data . . . 82
irna::David2tulip::Graph::Graph . . . 84
irna::David2tulip::Interact::Interact . . . 88
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irna::iRNA_pred::Interaction::Interaction
: Store information on interaction . . . 97

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Merge the xml files in a sqlite database . . . 103
irna::iRNA_stat::Mpi::Mpi
: Manage Mpi run . . . 106
irna::iRNA_pred::Mpi::Mpi
: Manage Mpi run . . . 112
irna::David2tulip::Multilist::Multilist . . . 118
irna::David2tulip::Mycarn_data::Mycarn_data . . . 122
irna::David2tulip::Name::Name . . . 125
irna::David2tulip::Node::Node
: Handle RNA information . . . 127
irna::iRNA_stat::NormScore::NormScore . . . 130
irna::iRNA_pred::Parse::Parse
: Parse data from the different software . . . 134
irna::iRNA_stat::Parser::Parser . . . 147
irna::David2tulip::Parser::Parser . . . 149
irna::iRNA_stat::Pickling::Pickling . . . 153
irna::iRNA_stat::pValue::pValue . . . 154
irna::David2tulip::pValue::pValue . . . 156
irna::iRNA_stat::pValue_selection::pValue_selection . . . 158
irna::iRNA_stat::Rand_data::Rand_data . . . 163
irna::iRNA_pred::RanRNA::RanRNA . . . 166
irna::iRNA_stat::Regression::Regression . . . 169
irna::iRNA_seq::Sequences::Sequences . . . 172
irna::David2tulip::Similarity::Similarity . . . 177
irna::iRNA_stat::Soft::Soft . . . 179
irna::David2tulip::Sqlite_manager::Sqlite_manager
: Handle database connection, disconnection and querying . . . 181
irna::iRNA_pred::Sqlite_manager::Sqlite_manager
: Handle database connection, disconnection and querying . . . 197
irna::iRNA_stat::Sqlite_manager::Sqlite_manager . . . 213
irna::iRNA_seq::sRNA::sRNA . . . 229
irna::iRNA_pred::Stat::Stat . . . 231
irna::iRNA_stat::Threshold::Threshold . . . 234

Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

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/home/amine/workspace/iRNA/irna/David2tulip/David.py 238
/home/amine/workspace/iRNA/irna/David2tulip/David2tulip.py 238
/home/amine/workspace/iRNA/irna/David2tulip/Davidconfig.py 238
/home/amine/workspace/iRNA/irna/David2tulip/Edge.py 239
/home/amine/workspace/iRNA/irna/David2tulip/Files.py 239
/home/amine/workspace/iRNA/irna/David2tulip/Gene_list.py 240
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/home/amine/workspace/iRNA/irna/David2tulip/Parser.py 242
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/home/amine/workspace/iRNA/irna/iRNA_pred/Merger.py 246
/home/amine/workspace/iRNA/irna/iRNA_pred/Mpi.py 246
/home/amine/workspace/iRNA/irna/iRNA_pred/Parse.py 247
/home/amine/workspace/iRNA/irna/iRNA_pred/RanRNA.py 247
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/home/amine/workspace/iRNA/irna/iRNA_seq/__init__.py 237
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/home/amine/workspace/iRNA/irna/iRNA_seq/sRNA.py 249
/home/amine/workspace/iRNA/irna/iRNA_stat/__init__.py 237
/home/amine/workspace/iRNA/irna/iRNA_stat/Analysis.py 249
/home/amine/workspace/iRNA/irna/iRNA_stat/Communication.py 249
/home/amine/workspace/iRNA/irna/iRNA_stat/Computer.py 250
/home/amine/workspace/iRNA/irna/iRNA_stat/Draw_data.py 250
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/home/amine/workspace/iRNA/irna/iRNA_stat/Execute.py 251
/home/amine/workspace/iRNA/irna/iRNA_stat/Exp_data.py 251
/home/amine/workspace/iRNA/irna/iRNA_stat/Files.py 240
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/home/amine/workspace/iRNA/irna/iRNA_stat/Regression.py 253
/home/amine/workspace/iRNA/irna/iRNA_stat/Soft.py 253
/home/amine/workspace/iRNA/irna/iRNA_stat/Sqlite_manager.py 244
/home/amine/workspace/iRNA/irna/iRNA_stat/Threshold.py 253

Chapter 5

Namespace Documentation

5.1 irna Namespace Reference

Namespaces

- namespace David2tulip
- namespace iRNA_pred
- namespace iRNA_seq
- namespace iRNA_stat

5.2 irna::David2tulip Namespace Reference

Namespaces

- namespace David
- namespace David2tulip
- namespace Davidconfig
- namespace Edge
- namespace Files
- namespace Gene_list
- namespace Graph
- namespace Interact
- namespace Multilist
- namespace Mycarn_data
- namespace Name
- namespace Node
- namespace Parser
- namespace pValue
- namespace Similarity
- namespace Sqlite_manager

5.3 irna::David2tulip::David Namespace Reference

Classes

- class David

5.4 irna::David2tulip::David2tulip Namespace Reference

Functions

- def main

  Main program ###.

5.4.1 Function Documentation

5.4.1.1 def irna::David2tulip::David2tulip::main ( )

Main program ###.

Determine les fichiers fournis en arguments def getArgument(): """ Determine the argument

Returns

: arguments """ #Parsing arguments parser = argparse.ArgumentParser(description='-Create nodes and edge csv for Tulip from multiple datasets.') parser.-add_argument('-m', '--multilist',help='Multilist file from Mycarn',required=True) parser.set_defaults(pValue=None) parser.add_argument('-l', '--filter',help='-Filter multilist for only known metabolites and use it for analysis') parser.-add_argument('-s','--similarity',help='Set similarity of sRNA groups') parser.-add_argument('-p', '--pValue',help='pValue of selected files') parser.add_-argument('-r', '--results',help='Path to result repertory',required=True) parser.-add_argument('-d', '--david',help='Submit multilist to DAVID',action='store-_true') parser.add_argument('-i', '--interact',help='Path to interaction file') parser.add_argument('-e', '--enrichment',help='Path to DAVID enrichment file') parser.add_argument('-y','--mycarn',help='Path to Mycarn db file') parser.add-_argument('-f', '--fastmode',help='Use sqlitebck package to get faster sqlite implementation',action='store_true') args = parser.parse_args()

#Verify usage usage(parser,args) return args

Main program function

Definition at line 114 of file David2tulip.py.

5.5 irna::David2tulip::Davidconfig Namespace Reference

Classes

- class Davidconfig

5.6 irna::David2tulip::Edge Namespace Reference

Classes

- class Edge

  : Handle interaction

5.7 irna::David2tulip::Files Namespace Reference

Classes

- class Files

5.8 irna::David2tulip::Gene_list Namespace Reference

Classes

- class Gene_list

  : Handle DAVID enrichment data

5.9 irna::David2tulip::Graph Namespace Reference

Classes

- class Graph

5.10 irna::David2tulip::Interact Namespace Reference

Classes

- class Interact

5.11 irna::David2tulip::Multilist Namespace Reference

Classes

- class Multilist

5.12 irna::David2tulip::Mycarn_data Namespace Reference

Classes

- class Mycarn_data

5.13 irna::David2tulip::Name Namespace Reference

Classes

- class Name

5.14 irna::David2tulip::Node Namespace Reference

Classes

- class Node

  : Handle RNA information

5.15 irna::David2tulip::Parser Namespace Reference

Classes

- class Parser

5.16 irna::David2tulip::pValue Namespace Reference

Classes

- class pValue

5.17 irna::David2tulip::Similarity Namespace Reference

Classes

- class Similarity

5.18 irna::David2tulip::Sqlite_manager Namespace Reference

Classes

- class Sqlite_manager
  : Handle database connection, disconnection and querying.

5.19 irna::iRNA_pred Namespace Reference

Namespaces

- namespace Comparison
- namespace Fasta
- namespace Files
- namespace Interaction
- namespace iRNA_pred
- namespace Merger
- namespace Mpi
- namespace Parse
- namespace RanRNA
- namespace Sqlite_manager
- namespace Stat

5.20 irna::iRNA_pred::Comparison Namespace Reference

Classes

- class Comparaison
  : Create coupled files and the list of comparison

5.21 irna::iRNA_pred::Fasta Namespace Reference

Classes

- class Fasta
  : Write fasta needed for the different software from a multifasta

5.22 irna::iRNA_pred::Files Namespace Reference

Classes

- class Files

  :

5.23 irna::iRNA_pred::Interaction Namespace Reference

Classes

- class Interaction

  : Store information on interaction.

5.24 irna::iRNA_pred::iRNA_pred Namespace Reference

Functions

- def WriteAllExecTime

  Write execution time.
- def saveData

  Save data in a sqlite database.
- def main

  : Main program

5.24.1 Function Documentation

5.24.1.1 def irna::iRNA_pred::iRNA_pred::main ( )

: Main program

Author

: Amine Ghozlane

Definition at line 68 of file iRNA_pred.py.

References saveData(), and WriteAllExecTime().

Referenced by saveData().

5.24.1.2 def irna::iRNA_pred::iRNA_pred::saveData (*data_files, fastmode*)

Save data in a sqlite database.

Definition at line 40 of file iRNA_pred.py.

References main().

Referenced by main(), and WriteAllExecTime().

5.24.1.3 def irna::iRNA_pred::iRNA_pred::WriteAllExecTime (*result_out, start, end*)

Write execution time.

Parameters

result_out,:	Time result
start,:	Date of start
end,:	Date of end

Definition at line 25 of file iRNA_pred.py.

References saveData().

Referenced by main().

5.25 irna::iRNA_pred::Merger Namespace Reference

Classes

- class Merger

  Merge the xml files in a sqlite database.

5.26 irna::iRNA_pred::Mpi Namespace Reference

Classes

- class Mpi

  : Manage Mpi run

5.27 irna::iRNA_pred::Parse Namespace Reference

Classes

- class Parse

  : Parse data from the different software.

5.28 irna::iRNA_pred::RanRNA Namespace Reference

Classes

- class RanRNA

Variables

- tuple generator = RanRNA(0.41728640,141,100,"/home/amine/workspace/-Mycarn_old/data/test/")

5.28.1 Variable Documentation

5.28.1.1 tuple irna::iRNA_pred::RanRNA::generator = RanRNA(0.41728640,141,100,"/home/amine/workspace/Mycarn_old/data/test/")

Definition at line 113 of file RanRNA.py.

5.29 irna::iRNA_pred::Sqlite_manager Namespace Reference

Classes

- class Sqlite_manager

  : Handle database connection, disconnection and querying.

5.30 irna::iRNA_pred::Stat Namespace Reference

Classes

- class Stat

5.31 irna::iRNA_seq Namespace Reference

Namespaces

- namespace Files
- namespace Genbank
- namespace iRNA_seq
- namespace Sequences
- namespace sRNA

5.32 irna::iRNA_seq::Files Namespace Reference

Classes

- class Files

5.33 irna::iRNA_seq::Genbank Namespace Reference

Classes

- class Genbank

5.34 irna::iRNA_seq::iRNA_seq Namespace Reference

Functions

- def main

  Main program function.

5.34.1 Function Documentation

5.34.1.1 def irna::iRNA_seq::iRNA_seq::main ( )

Main program function.

Definition at line 18 of file iRNA_seq.py.

5.35 irna::iRNA_seq::Sequences Namespace Reference

Classes

- class Sequences

5.36 irna::iRNA_seq::sRNA Namespace Reference

Classes

- class sRNA

5.37 irna::iRNA_stat Namespace Reference

Namespaces

- namespace Analysis
- namespace Communication
- namespace Computer
- namespace Draw_data
- namespace Ecdf
- namespace Execute
- namespace Exp_data
- namespace Files
- namespace Interaction
- namespace iRNA_stat
- namespace Mpi
- namespace NormScore
- namespace Parser
- namespace Pickling
- namespace pValue
- namespace pValue_selection
- namespace Rand_data
- namespace Regression
- namespace Soft
- namespace Sqlite_manager
- namespace Threshold

5.38 irna::iRNA_stat::Analysis Namespace Reference

Classes

- class Analysis

5.39 irna::iRNA_stat::Communication Namespace Reference

Classes

- class Communication
  : Empty object used for mpi communication

5.40 irna::iRNA_stat::Computer Namespace Reference

Classes

- class Computer

5.41 irna::iRNA_stat::Draw_data Namespace Reference

Classes

- class draw_data

Variables

- tuple graphics = importr('graphics')
- tuple grdevices = importr('grDevices')
- tuple base = importr('base')
- tuple stats = importr('stats')
- tuple pROC = importr('pROC')
- tuple Cairo = importr('Cairo')

5.41.1 Variable Documentation

5.41.1.1 tuple irna::iRNA_stat::Draw_data::base = importr('base')

Definition at line 17 of file Draw_data.py.

5.41.1.2 tuple irna::iRNA_stat::Draw_data::Cairo = importr('Cairo')

Definition at line 20 of file Draw_data.py.

5.41.1.3 tuple irna::iRNA_stat::Draw_data::graphics = importr('graphics')

Definition at line 15 of file Draw_data.py.

5.41.1.4 tuple irna::iRNA_stat::Draw_data::grdevices = importr('grDevices')

Definition at line 16 of file Draw_data.py.

5.41.1.5 tuple irna::iRNA_stat::Draw_data::pROC = importr('pROC')

Definition at line 19 of file Draw_data.py.

5.41.1.6 tuple irna::iRNA_stat::Draw_data::stats = importr('stats')

Definition at line 18 of file Draw_data.py.

5.42 irna::iRNA_stat::Ecdf Namespace Reference

Classes

- class Ecdf

5.43 irna::iRNA_stat::Execute Namespace Reference

Classes

- class Execute

5.44 irna::iRNA_stat::Exp_data Namespace Reference

Classes

- class Exp_data

5.45 irna::iRNA_stat::Files Namespace Reference

Classes

- class Files

5.46 irna::iRNA_stat::Interaction Namespace Reference

Classes

- class Interaction

5.47 irna::iRNA_stat::iRNA_stat Namespace Reference

Functions

- def usage

  Test correct usage of arguments.
- def main

  Determine les fichiers fournis en arguments def getArgument(): """ Determine the argument.

5.47.1 Function Documentation

5.47.1.1 def irna::iRNA_stat::iRNA_stat::main ( )

Determine les fichiers fournis en arguments def getArgument(): """ Determine the argument.

Returns

: arguments """ #Parsing arguments parser = argparse.ArgumentParser(description='-Statistical analysis of RNA-RNA predict interaction.') parser.add_argument('-d', '--iRNA_db',help='Path to mycarn db',required=True) parser.add_argument('-i', '--soft_inf',help='Path to soft information file',required=True) parser.add_argument('-e', '--exp_inf',help='Path to experimental data file') parser.add_argument('-n', '--rand_inf',help='Path to random data file') parser.add_argument('-a', '--random',help='-Random analysis',action='store_true') parser.add_argument('-r', '--results',help='-Path to result repertory',required=True) args = parser.parse_args()

#Verify usage usage(parser,args) return args

Main program function

Definition at line 66 of file iRNA_stat.py.

Referenced by usage().

5.47.1.2 def irna::iRNA_stat::iRNA_stat::usage (*parser, args*)

Test correct usage of arguments.

Parameters

parser,:	Parser object
args,:	Arguments

Definition at line 32 of file iRNA_stat.py.

References main().

5.48 irna::iRNA_stat::Mpi Namespace Reference

Classes

- class Mpi

  : Manage Mpi run

5.49 irna::iRNA_stat::NormScore Namespace Reference

Classes

- class NormScore

5.50 irna::iRNA_stat::Parser Namespace Reference

Classes

- class Parser

5.51 irna::iRNA_stat::Pickling Namespace Reference

Classes

- class Pickling

5.52 irna::iRNA_stat::pValue Namespace Reference

Classes

- class pValue

5.53 irna::iRNA_stat::pValue_selection Namespace Reference

Classes

- class pValue_selection

5.54 irna::iRNA_stat::Rand_data Namespace Reference

Classes

- class Rand_data

5.55 irna::iRNA_stat::Regression Namespace Reference

Classes

- class Regression

5.56 irna::iRNA_stat::Soft Namespace Reference

Classes

- class Soft

5.57 irna::iRNA_stat::Sqlite_manager Namespace Reference

Classes

- class Sqlite_manager

5.58 irna::iRNA_stat::Threshold Namespace Reference

Classes

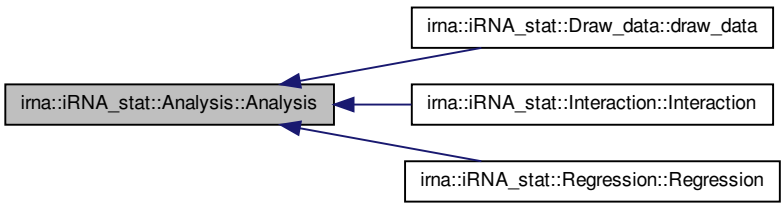
- class Threshold

Chapter 6

Class Documentation

6.1 irna::iRNA_stat::Analysis::Analysis Class Reference

Inheritance diagram for irna::iRNA_stat::Analysis::Analysis:



Public Member Functions

- def __init__

  Instanciate Analysis object.
- def commun_values

  Detect commune nan values.
- def getRangePosit

  Get one column.

6.1.1 Detailed Description

Definition at line 9 of file Analysis.py.

6.1.2 Constructor & Destructor Documentation

6.1.2.1 def irna::iRNA_stat::Analysis::Analysis::__init__ (*self*)

Instanciate Analysis object.

Definition at line 14 of file Analysis.py.

6.1.3 Member Function Documentation

6.1.3.1 def irna::iRNA_stat::Analysis::Analysis::commun_values (*self, cumneg_nanvalues, normscore_nanvalues*)

Detect commune nan values.

Definition at line 21 of file Analysis.py.

References getRangePosit().

Referenced by irna::iRNA_stat::Regression::Regression::linear_regression(), and irna::iRNA_stat::Draw_data::draw_data::plot_linear_regression().

6.1.3.2 def irna::iRNA_stat::Analysis::Analysis::getRangePosit (*self, array, col*)

Get one column.

Parameters

array,:	Matrix array of data
col,:	Selected column

Definition at line 33 of file Analysis.py.

Referenced by commun_values(), irna::iRNA_stat::Interaction::Interaction::Interaction_data(), and irna::iRNA_stat::Draw_data::draw_data::write_interaction().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Analysis.py

6.2 irna::iRNA_stat::Communication::Communication Class Reference

: Empty object used for mpi communication

Public Member Functions

- def __init__

Empty object used to send messages.

6.2.1 Detailed Description

: Empty object used for mpi communication

Author

: Amine Ghozlane

Version

: 1.0

Definition at line 7 of file Communication.py.

6.2.2 Constructor & Destructor Documentation

6.2.2.1 def irna::iRNA_stat::Communication::Communication::__init__ (*self*)

Empty object used to send messages.

Definition at line 12 of file Communication.py.

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Communication.py

6.3 irna::iRNA_pred::Comparison::Comparaison Class Reference

: Create coupled files and the list of comparison

Public Member Functions

- def __init__
  The constructor.
- def runCommand
  Run command.
- def createCouple
  Create the couple.
- def createRNAcofoldCouple
  Create the couple for RNAcofold.
- def getCouple
  Get a couple in sRNA repertory.
- def getRNAcofoldCouple

Get a couple in sRNA repertory.

- def getName

  Get the name of the fasta file.

- def getCommand

  Build the command.

- def getFastaFiles

  Get the list of data.

- def getUnique

  Get unique data.

- def getComparison

  Define the comparison.

- def runComparison

  Run a comparison.

- def manageCouple

  Manage the creation of couples.

- def prepareComparaison

  Control Mpi procedure.

Public Attributes

- comp_list
- sRNA_out
- mRNA_out
- soft_path
- mf_mRNA

6.3.1 Detailed Description

: Create coupled files and the list of comparison

Definition at line 15 of file Comparison.py.

6.3.2 Constructor & Destructor Documentation

6.3.2.1 def irna::iRNA_pred::Comparison::Comparaison::__init__ (*self, comp_list, sRNA_out, mRNA_out, soft_path, mf_mRNA*)

The constructor.

Definition at line 20 of file Comparison.py.

6.3.3 Member Function Documentation

6.3.3.1 def irna::iRNA_pred::Comparison::Comparaison::createCouple (*self, sRNA, mRNA*)

Create the couple.

Parameters

sRNA,:	name of the sRNA file
mRNA,:	name of the mRNA file

Definition at line 57 of file Comparison.py.

References createRNAcofoldCouple(), mRNA_out, and sRNA_out.

Referenced by manageCouple(), and runCommand().

6.3.3.2 def irna::iRNA_pred::Comparison::Comparaison::createRNAcofoldCouple (*self, sRNA, mRNA*)

Create the couple for RNAcofold.

Parameters

sRNA,:	name of the sRNA file
mRNA,:	name of the mRNA file

Definition at line 82 of file Comparison.py.

References getCouple(), mRNA_out, and sRNA_out.

Referenced by createCouple(), and manageCouple().

6.3.3.3 def irna::iRNA_pred::Comparison::Comparaison::getCommand (*self, build_command, sRNA, mRNA, RNAcofold_flag*)

Build the command.

Parameters

build_command,:	Soft command
sRNA,:	name of the sRNA file
mRNA,:	name of the mRNA file
RNAcofold_flag,:	Flag for RNAcofold special case

Returns

: Comparison command

Definition at line 158 of file Comparison.py.

References getCouple(), getFastaFiles(), getRNAcofoldCouple(), and getUnique().

Referenced by getComparison(), and getRNAcofoldCouple().

6.3.3.4 def irna::iRNA_pred::Comparison::Comparaison::getComparison (*self, command, RNAcofold_flag*)

Define the comparison.

Parameters

command,:	Soft command
RNAcofold_flag,:	Flag for RNAcofold special case

Returns

: Comparison list and the number of comparison

Definition at line 206 of file Comparison.py.

References comp_list, getCommand(), getFastaFiles(), getUnique(), mRNA_out, runComparison(), and sRNA_out.

Referenced by getFastaFiles().

6.3.3.5 def irna::iRNA_pred::Comparison::Comparaison::getCouple (*self, sRNA, mRNA*)

Get a couple in sRNA repertory.

Parameters

sRNA,:	name of the sRNA file
mRNA,:	name of the mRNA file

Returns

: Return the file couple

Definition at line 109 of file Comparison.py.

References getRNAcofoldCouple(), and sRNA_out.

Referenced by createRNAcofoldCouple(), and getCommand().

6.3.3.6 def irna::iRNA_pred::Comparison::Comparaison::getFastaFiles (*self, repertory*)

Get the list of data.

Parameters

repertory,:	Interest repertory

Returns

: Return the list of file of interest

Definition at line 183 of file Comparison.py.

References getComparison().

Referenced by getCommand(), getComparison(), and manageCouple().

6.3.3.7 def irna::iRNA_pred::Comparison::Comparaison::getName (*self, regex, fasta_file*)

Get the name of the fasta file.

Parameters

regex,:	Regex used to detect the name
fasta_file,:	A standard fasta file with her path

Returns

: The name of the fasta file

Definition at line 141 of file Comparison.py.

References mf_mRNA, mRNA_out, soft_path, and sRNA_out.

Referenced by getRNAcofoldCouple().

6.3.3.8 def irna::iRNA_pred::Comparison::Comparaison::getRNAcofoldCouple (*self, sRNA, mRNA*)

Get a couple in sRNA repertory.

Parameters

sRNA,:	name of the sRNA file
mRNA,:	name of the mRNA file

Returns

: Return the file couple

Definition at line 125 of file Comparison.py.

References getCommand(), and getName().

Referenced by getCommand(), and getCouple().

6.3.3.9 def irna::iRNA_pred::Comparison::Comparaison::getUnique (*self, data_list*)

Get unique data.

Parameters

data_list,:	list of data

Definition at line 192 of file Comparison.py.

References comp_list.

Referenced by irna::iRNA_stat::pValue_selection::pValue_selection::compute_-Davidmatrix(), getCommand(), and getComparison().

6.3.3.10 def irna::iRNA_pred::Comparison::Comparaison::manageCouple (*self*)

Manage the creation of couples.

Definition at line 308 of file Comparison.py.

References comp_list, createCouple(), createRNAcofoldCouple(), getFastaFiles(), manageCouple(), mRNA_out, prepareComparaison(), and sRNA_out.

Referenced by manageCouple(), and runComparison().

6.3.3.11 def irna::iRNA_pred::Comparison::Comparaison::prepareComparaison (*self*)

Control Mpi procedure.

Definition at line 344 of file Comparison.py.

Referenced by manageCouple().

6.3.3.12 def irna::iRNA_pred::Comparison::Comparaison::runCommand (*self, cmd*)

Run command.

Parameters

cmd,:	Command to run

Definition at line 39 of file Comparison.py.

References createCouple(), and sRNA_out.

6.3.3.13 def irna::iRNA_pred::Comparison::Comparaison::runComparison (*self, cmd*)

Run a comparison.

Parameters

cmd,:	Soft command

Returns

: Return soft result

Definition at line 288 of file Comparison.py.

References comp_list, manageCouple(), mRNA_out, and sRNA_out.

Referenced by getComparison().

6.3.4 Member Data Documentation

6.3.4.1 irna::iRNA_pred::Comparison::Comparaison::comp_list

Definition at line 20 of file Comparison.py.

Referenced by getComparison(), getUnique(), manageCouple(), and runComparison().

6.3.4.2 irna::iRNA_pred::Comparison::Comparaison::mf_mRNA

Definition at line 20 of file Comparison.py.

Referenced by getName().

6.3.4.3 irna::iRNA_pred::Comparison::Comparaison::mRNA_out

Definition at line 20 of file Comparison.py.

Referenced by createCouple(), createRNAcofoldCouple(), getComparison(), getName(), manageCouple(), and runComparison().

6.3.4.4 irna::iRNA_pred::Comparison::Comparaison::soft_path

Definition at line 20 of file Comparison.py.

Referenced by getName().

6.3.4.5 irna::iRNA_pred::Comparison::Comparaison::sRNA_out

Definition at line 20 of file Comparison.py.

Referenced by createCouple(), createRNAcofoldCouple(), getComparison(), getCouple(), getName(), manageCouple(), runCommand(), and runComparison().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_pred/Comparison.py

6.4 irna::iRNA_stat::Computer::Computer Class Reference

Public Member Functions

- def __init__

  Instanciate Computer object.

Public Attributes

- ppv
- sensitivity
- classtype
- curve_param
- softid
- numsoft
- name
- cumneg
- type_sol
- score_type
- pValue_type
- nbinteract
- interactions
- sRNAid_tab
- unique_sRNAidinint
- norm_score
- pos
- pValue
- select
- interact

6.4.1 Detailed Description

Definition at line 9 of file Computer.py.

6.4.2 Constructor & Destructor Documentation

6.4.2.1 def irna::iRNA_stat::Computer::Computer::__init__ (*self, softid, name, numsoft, type_sol, score_type, dbmanage, args*)

Instanciate Computer object.

Parameters

softid,:	Id of the software
name,:	Name of the software
numsoft,:	Corresponding numsoft in soft_inf
type_sol,:	Type of solution
score_type,:	Type of score
dbmanage,:	Access to the database
args,:	Arguments

Definition at line 22 of file Computer.py.

6.4.3 Member Data Documentation

6.4.3.1 irna::iRNA_stat::Computer::Computer::classtype

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Interaction::Interaction::compute_sensitivity().

6.4.3.2 irna::iRNA_stat::Computer::Computer::cumneg

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Regression::Regression::ecdf_estimate(), irna::iRNA_stat::Regression::Regression::linear_regression(), and irna::iRNA_stat::Regression::Regression::run().

6.4.3.3 irna::iRNA_stat::Computer::Computer::curve_param

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Regression::Regression::ecdf_estimate(), irna::iRNA_stat::Regression::Regression::linear_regression(), and irna::iRNA_stat::Regression::Regression::run().

6.4.3.4 irna::iRNA_stat::Computer::Computer::interact

Definition at line 22 of file Computer.py.

6.4.3.5 irna::iRNA_stat::Computer::Computer::interactions

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Interaction::Interaction::compute_sensitivity(), irna::iRNA_stat::NormScore::NormScore::normUniqueSolution(), irna::iRNA_stat::pValue::pValue::run(), and irna::iRNA_stat::NormScore::NormScore::run().

6.4.3.6 irna::iRNA_stat::Computer::Computer::name

Definition at line 22 of file Computer.py.

6.4.3.7 irna::iRNA_stat::Computer::Computer::nbinteract

Definition at line 22 of file Computer.py.

6.4.3.8 irna::iRNA_stat::Computer::Computer::norm_score

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Regression::Regression::ecdf_estimate(), irna::iRNA_stat::Regression::Regression::linear_regression(), irna::iRNA_stat::NormScore::NormScore::normSeveralContactScore(), irna::iRNA_stat::NormScore::NormScore::normSeveralEnergy(), irna::iRNA_stat::NormScore::NormScore::normSeveralScore(), irna::iRNA_stat::NormScore::NormScore::normUniqueSolution(), irna::iRNA_stat::pValue::pValue::run(), and irna::iRNA_stat::NormScore::NormScore::run().

6.4.3.9 irna::iRNA_stat::Computer::Computer::numsoft

Definition at line 22 of file Computer.py.

6.4.3.10 irna::iRNA_stat::Computer::Computer::pos

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::NormScore::NormScore::defnormfunction(), irna::iRNA_stat::Interaction::Interaction::Interaction_data(), irna::iRNA_stat::NormScore::NormScore::normSeveralContactScore(), irna::iRNA_stat::NormScore::NormScore::normSeveralEnergy(), irna::iRNA_stat::NormScore::NormScore::normSeveralScore(), irna::iRNA_stat::NormScore::NormScore::normUniqueSolution(), and irna::iRNA_stat::NormScore::NormScore::run().

6.4.3.11 irna::iRNA_stat::Computer::Computer::ppv

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Interaction::Interaction::compute_sensitivity().

6.4.3.12 irna::iRNA_stat::Computer::Computer::pValue

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Files::Files::case(), irna::iRNA_stat::Files::Files::data_format(), and irna::iRNA_stat::Files::Files::getfiles().

6.4.3.13 irna::iRNA_stat::Computer::Computer::pValue_type

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Regression::Regression::ecdf_estimate().

6.4.3.14 irna::iRNA_stat::Computer::Computer::score_type

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::NormScore::NormScore::run().

6.4.3.15 irna::iRNA_stat::Computer::Computer::select

Definition at line 22 of file Computer.py.

6.4.3.16 irna::iRNA_stat::Computer::Computer::sensitivity

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Interaction::Interaction::compute_sensitivity().

6.4.3.17 irna::iRNA_stat::Computer::Computer::softid

Definition at line 22 of file Computer.py.

6.4.3.18 irna::iRNA_stat::Computer::Computer::sRNAid_tab

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::Regression::Regression::ecdf_estimate(), and irna::iRNA_stat::Regression::Regression::linear_regression().

6.4.3.19 irna::iRNA_stat::Computer::Computer::type_sol

Definition at line 22 of file Computer.py.

Referenced by irna::iRNA_stat::NormScore::NormScore::defnormfunction(), and irna::iRNA_stat::Interaction::Interaction::Interaction_data().

6.4.3.20 irna::iRNA_stat::Computer::Computer::unique_sRNAidinint

Definition at line 22 of file Computer.py.

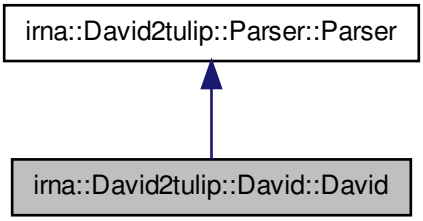
Referenced by irna::iRNA_stat::Regression::Regression::ecdf_estimate(), and irna::iRNA_stat::Regression::Regression::linear_regression().

The documentation for this class was generated from the following file:

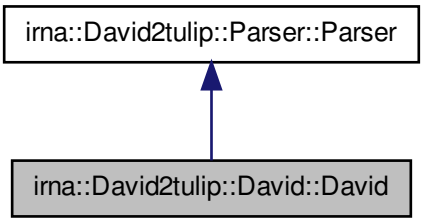
- /home/amine/workspace/iRNA/irna/iRNA_stat/Computer.py

6.5 irna::David2tulip::David::David Class Reference

Inheritance diagram for irna::David2tulip::David::David:



Collaboration diagram for irna::David2tulip::David::David:



Public Member Functions

- def __init__

  Instanciate david object.
- def davidConnection

  Connection to david.
- def analysis

  Proceed to DAVID enrichment and store useful data.
- def parseChart

  Parse DAVID chart data.
- def writefile

  Pickle DAVID information.
- def setdata

  Set data from DAVID into the graph.

Public Attributes

- listType
- david_chart

6.5.1 Detailed Description

Definition at line 14 of file David.py.

6.5.2 Constructor & Destructor Documentation

6.5.2.1 def irna::David2tulip::David::David::__init__ (*self*, *david_file* = None)

Instanciate david object.

Parameters

david_file,:	Path to david file

Definition at line 21 of file David.py.

6.5.3 Member Function Documentation

6.5.3.1 def irna::David2tulip::David::David::analysis (*self*, *graph*)

Proceed to DAVID enrichment and store useful data.

Parameters

graph,:	Graph object

Definition at line 44 of file David.py.

References david_chart, irna::David2tulip::Parser::Parser::getsRNA(), irna::David2tulip::Parser::Parser::getTarget(), listType, parseChart(), and writefile().

Referenced by davidConnection().

6.5.3.2 def irna::David2tulip::David::David::davidConnection (*self*)

Connection to david.

Definition at line 32 of file David.py.

References analysis(), and davidConnection().

Referenced by davidConnection().

6.5.3.3 def irna::David2tulip::David::David::parseChart (*self, david_chart, sRNA*)

Parse DAVID chart data.

Parameters

david_chart,:	DAVID result
sRNA,:	sRNA

Definition at line 68 of file David.py.

References david_chart, irna::David2tulip::Parser::Parser::printObject(), and setdata().

Referenced by analysis().

6.5.3.4 def irna::David2tulip::David::David::setdata (*self, node_objects, edge_objects*)

Set data from DAVID into the graph.

Parameters

node_objects,:	List of node objects
edge_objects,:	List of edge objects

Returns

: Node and edge objects

Definition at line 86 of file David.py.

Referenced by parseChart().

6.5.3.5 def irna::David2tulip::David::David::writefile (*self, results*)

Pickle DAVID information.

Parameters

results,:	Path to result file

Definition at line 76 of file David.py.

References david_chart, and irna::David2tulip::Parser::Parser::getlinkedge().

Referenced by analysis().

6.5.4 Member Data Documentation

6.5.4.1 irna::David2tulip::David::David::david_chart

Definition at line 21 of file David.py.

Referenced by analysis(), parseChart(), and writefile().

6.5.4.2 irna::David2tulip::David::David::listType

Definition at line 21 of file David.py.

Referenced by analysis().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/David2tulip/David.py

6.6 irna::David2tulip::Davidconfig::Davidconfig Class Reference

Public Member Functions

- def __init__

  Instanciate Davidconfig object.
- def readconfig

  Read david config.

- def writeconfig

  Write david config.

Public Attributes

- config
- davidconfig_file

6.6.1 Detailed Description

Definition at line 9 of file Davidconfig.py.

6.6.2 Constructor & Destructor Documentation

6.6.2.1 def irna::David2tulip::Davidconfig::Davidconfig::__init__ (*self, config*)

Instanciate Davidconfig object.

Parameters

config,:	config path

Definition at line 16 of file Davidconfig.py.

6.6.3 Member Function Documentation

6.6.3.1 def irna::David2tulip::Davidconfig::Davidconfig::readconfig (*self, davidobject*)

Read david config.

Parameters

davidobject,:	David pkl

Definition at line 26 of file Davidconfig.py.

References davidconfig_file, and writeconfig().

6.6.3.2 def irna::David2tulip::Davidconfig::Davidconfig::writeconfig (*self*)

Write david config.

Definition at line 43 of file Davidconfig.py.

References davidconfig_file.

Referenced by readconfig().

6.6.4 Member Data Documentation

6.6.4.1 irna::David2tulip::Davidconfig::Davidconfig::config

Definition at line 16 of file Davidconfig.py.

Referenced by irna::David2tulip::Files::Files::data_format(), and irna::David2tulip::Files::Files::getfiles().

6.6.4.2 irna::David2tulip::Davidconfig::Davidconfig::davidconfig_file

Definition at line 16 of file Davidconfig.py.

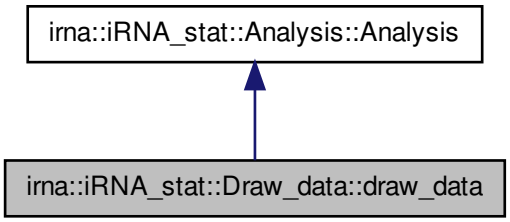
Referenced by readconfig(), and writeconfig().

The documentation for this class was generated from the following file:

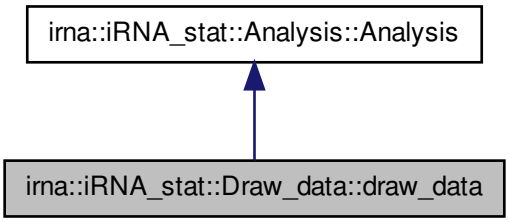
- /home/amine/workspace/iRNA/irna/David2tulip/Davidconfig.py

6.7 irna::iRNA_stat::Draw_data::draw_data Class Reference

Inheritance diagram for irna::iRNA_stat::Draw_data::draw_data:



Collaboration diagram for irna::iRNA_stat::Draw_data::draw_data:



Public Member Functions

- def __init__

  Instanciate draw_data object.
- def write_curve_param_data
- def plot_linear_regression

  Plot linear regression of random data.
- def getnames

  name of sofwares
- def plot_roc_curves

  Plot roc curve.
- def plot_roc_curves_statistics

  Statistical analysis of roc.
- def write_pValue

  Print pValue.
- def write_rocthresValue
- def write_rocAuc

  write AUC
- def meanArray

  Mean array.
- def getPredplotvect

  Get float vector from listobj.
- def pred_plot

  Plot sensitivity and ppv mean.
- def write_pred_plot

  Write mean sensitivity and ppv of each software.
- def write_sens_ppv

  Write sensitivity and ppv.

- def exec_plot

  Plot execution time.
- def write_pValueSelect
- def write_frequency
- def write_similarity
- def frequency_plot
- def similarity_plot
- def write_pValueInteract
- def getBoolselect
- def write_interaction
- def write_general_data
- def plot

  Plot main function.

Public Attributes

- result

6.7.1 Detailed Description

Definition at line 22 of file Draw_data.py.

6.7.2 Constructor & Destructor Documentation

6.7.2.1 def irna::iRNA_stat::Draw_data::draw_data::__init__ (*self, result*)

Instanciate draw_data object.

Definition at line 28 of file Draw_data.py.

6.7.3 Member Function Documentation

6.7.3.1 def irna::iRNA_stat::Draw_data::draw_data::exec_plot (*self, execution_time*)

Plot execution time.

Parameters

execution_time,:	Execution time

Definition at line 362 of file Draw_data.py.

References result, and write_frequency().

Referenced by plot(), and write_sens_ppv().

6.7.3.2 def irna::iRNA_stat::Draw_data::draw_data::frequency_plot (*self, listobj*)

Parameters

listobj,:	List of Computer object

Definition at line 419 of file Draw_data.py.

References result.

Referenced by plot(), and write_frequency().

6.7.3.3 def irna::iRNA_stat::Draw_data::draw_data::getBoolselect (*self, obj, i*)

Definition at line 459 of file Draw_data.py.

References result, and write_general_data().

Referenced by similarity_plot(), and write_pValueInteract().

6.7.3.4 def irna::iRNA_stat::Draw_data::draw_data::getnames (*self, listobj*)

name of sofwares

Parameters

listobj,:	List of Computer object

Definition at line 151 of file Draw_data.py.

References plot_roc_curves(), and result.

Referenced by getPredplotvect(), plot_linear_regression(), and plot_roc_curves().

6.7.3.5 def irna::iRNA_stat::Draw_data::draw_data::getPredplotvect (*self, listobj*)

Get float vector from listobj.

Parameters

listobj,:	List of Computer object

Definition at line 296 of file Draw_data.py.

References getnames(), result, and write_pred_plot().

Referenced by meanArray(), and write_rocAuc().

6.7.3.6 def irna::iRNA_stat::Draw_data::draw_data::meanArray (*self, array*)

Mean array.

Parameters

array,:	Matrix array

Definition at line 282 of file Draw_data.py.

References getPredplotvect(), meanArray(), and pred_plot().

Referenced by meanArray(), pred_plot(), and write_rocAuc().

6.7.3.7 def irna::iRNA_stat::Draw_data::draw_data::plot (*self, args, soft_inf, listobj, dbmanage, execution_time*)

Plot main function.

Definition at line 504 of file Draw_data.py.

References exec_plot(), frequency_plot(), pred_plot(), similarity_plot(), write_frequency(), write_pred_plot(), write_pValueSelect(), write_sens_ppv(), and write_similarity().

Referenced by write_interaction().

6.7.3.8 def irna::iRNA_stat::Draw_data::draw_data::plot_linear_regression (*self, obj, soft_inf, numsoft, dbmanage*)

Plot linear regression of random data.

Parameters

obj,:	Computer object
soft_inf,:	Software information
numsoft,:	Number of the soft
dbmanage,:	Access to the database

Definition at line 109 of file Draw_data.py.

References irna::iRNA_stat::Analysis::Analysis::commun_values(), getnames(), and result.

Referenced by write_curve_param_data(), and write_interaction().

6.7.3.9 def irna::iRNA_stat::Draw_data::draw_data::plot_roc_curves (*self, listobj*)

Plot roc curve.

Parameters

listobj,:	List of Computer object

Definition at line 162 of file Draw_data.py.

References getnames(), plot_roc_curves_statistics(), and result.

Referenced by getnames(), and write_general_data().

6.7.3.10 def irna::iRNA_stat::Draw_data::draw_data::plot_roc_curves_statistics (*self, listobj*)

Statistical analysis of roc.

Parameters

listobj,:	List of Computer object

Definition at line 203 of file Draw_data.py.

References result, and write_pValue().

Referenced by plot_roc_curves(), and write_general_data().

6.7.3.11 def irna::iRNA_stat::Draw_data::draw_data::pred_plot (*self, listobj*)

Plot sensitivity and ppv mean.

Parameters

listobj,:	List of Computer object

Definition at line 307 of file Draw_data.py.

References meanArray(), result, and write_sens_ppv().

Referenced by meanArray(), and plot().

6.7.3.12 def irna::iRNA_stat::Draw_data::draw_data::similarity_plot (*self, listobj*)

Parameters

listobj,:	List of Computer object

Definition at line 430 of file Draw_data.py.

References getBoolselect(), and write_interaction().

Referenced by plot(), and write_similarity().

6.7.3.13 def irna::iRNA_stat::Draw_data::draw_data::write_curve_param_data (*self, listobj, dbmanage*)

Parameters

listobj,:	List of Computer object
dbmanage,:	Access to the database

Definition at line 37 of file Draw_data.py.

References plot_linear_regression().

Referenced by write_interaction().

6.7.3.14 def irna::iRNA_stat::Draw_data::draw_data::write_frequency (*self, listobj*)

Parameters

listobj,:	List of Computer object

Definition at line 387 of file Draw_data.py.

References frequency_plot(), and result.

Referenced by exec_plot(), and plot().

6.7.3.15 def irna::iRNA_stat::Draw_data::draw_data::write_general_data (*self, listobj*)

Parameters

listobj,:	List of Computer object

Definition at line 488 of file Draw_data.py.

References plot_roc_curves(), plot_roc_curves_statistics(), write_general_data(), write_interaction(), write_pValue(), write_pValueInteract(), write_rocAuc(), and write_rocthresValue().

Referenced by getBoolselect(), and write_general_data().

6.7.3.16 def irna::iRNA_stat::Draw_data::draw_data::write_interaction (*self, listobj, dbmanage, selection*)

Definition at line 466 of file Draw_data.py.

References irna::iRNA_stat::Analysis::Analysis::getRangePosit(), plot(), plot_linear_regression(), and write_curve_param_data().

Referenced by similarity_plot(), and write_general_data().

6.7.3.17 def irna::iRNA_stat::Draw_data::draw_data::write_pred_plot (*self, listobj*)

Write mean sensitivity and ppv of each software.

Parameters

listobj,:	List of Computer object
dbmanage,:	Access to the database

Definition at line 325 of file Draw_data.py.

References result.

Referenced by getPredplotvect(), and plot().

6.7.3.18 def irna::iRNA_stat::Draw_data::draw_data::write_pValue (*self, listobj, dbmanage*)

Print pValue.

Parameters

listobj,:	List of Computer object
dbmanage,:	Access to the database

Definition at line 225 of file Draw_data.py.

References result, and write_rocthresValue().

Referenced by plot_roc_curves_statistics(), and write_general_data().

6.7.3.19 def irna::iRNA_stat::Draw_data::draw_data::write_pValueInteract (*self, listobj, dbmanage*)

Parameters

listobj,:	List of Computer object
dbmanage,:	Access to the database

Definition at line 442 of file Draw_data.py.

References getBoolselect(), and result.

Referenced by write_general_data(), and write_similarity().

6.7.3.20 def irna::iRNA_stat::Draw_data::draw_data::write_pValueSelect (*self, listobj*)

Parameters

listobj,:	List of Computer object

Definition at line 372 of file Draw_data.py.

References result, and write_similarity().

Referenced by plot(), and write_sens_ppv().

6.7.3.21 def irna::iRNA_stat::Draw_data::draw_data::write_rocAuc (*self, listobj, auc_result*)

write AUC

Parameters

listobj,:	List of Computer object
auc_result,:	AUC result

Definition at line 264 of file Draw_data.py.

References getPredplotvect(), and meanArray().

Referenced by write_general_data(), and write_rocthresValue().

6.7.3.22 def irna::iRNA_stat::Draw_data::draw_data::write_rocthresValue (*self, listobj, coords_roc, dbmanage*)

Parameters

listobj,:	List of Computer object
coords_roc,:	Roc coordinates
dbmanage,:	Access to the database

Definition at line 245 of file Draw_data.py.

References result, and write_rocAuc().

Referenced by write_general_data(), and write_pValue().

6.7.3.23 def irna::iRNA_stat::Draw_data::draw_data::write_sens_ppv (*self, listobj, dbmanage*)

Write sensitivity and ppv.

Parameters

listobj,:	List of Computer object
dbmanage,:	Access to the database

Definition at line 342 of file Draw_data.py.

References exec_plot(), result, and write_pValueSelect().

Referenced by plot(), and pred_plot().

6.7.3.24 def irna::iRNA_stat::Draw_data::draw_data::write_similarity (*self, listobj*)

Parameters

listobj,:	List of Computer object

Definition at line 403 of file Draw_data.py.

References result, similarity_plot(), and write_pValueInteract().

Referenced by plot(), and write_pValueSelect().

6.7.4 Member Data Documentation

6.7.4.1 irna::iRNA_stat::Draw_data::draw_data::result

Definition at line 28 of file Draw_data.py.

Referenced by exec_plot(), frequency_plot(), getBoolselect(), getnames(), getPredplotvect(), plot_linear_regression(), plot_roc_curves(), plot_roc_curves_statistics(), pred_plot(), write_frequency(), write_pred_plot(), write_pValue(), write_pValueInteract(), write_pValueSelect(), write_rocthresValue(), write_sens_ppv(), and write_similarity().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Draw_data.py

6.8 irna::iRNA_stat::Ecdf::Ecdf Class Reference

Public Member Functions

- def __init__
- def __call__

Public Attributes

- observations

6.8.1 Detailed Description

Definition at line 12 of file Ecdf.py.

6.8.2 Constructor & Destructor Documentation

6.8.2.1 def irna::iRNA_stat::Ecdf::Ecdf::__init__ (*self, observations*)

Definition at line 14 of file Ecdf.py.

6.8.3 Member Function Documentation

6.8.3.1 def irna::iRNA_stat::Ecdf::Ecdf::__call__ (*self, x*)

Definition at line 18 of file Ecdf.py.

References observations.

6.8.4 Member Data Documentation

6.8.4.1 irna::iRNA_stat::Ecdf::Ecdf::observations

Definition at line 14 of file Ecdf.py.

Referenced by __call__().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Ecdf.py

6.9 irna::David2tulip::Edge::Edge Class Reference

: Handle interaction

Public Member Functions

- def __init__

  Instanciate Edge object.
- def println

  Print edge value.
- def __cmp__

  General method to compare edge based on the name of nodes.

Public Attributes

- node1
- node2
- pValue
- similarity
- category
- categoryName
- termName
- sRNA_deb
- sRNA_end
- mRNA_deb
- mRNA_end
- dbrec

6.9.1 Detailed Description

: Handle interaction

Author

: Amine Ghozlane

Version

: 1.0

Definition at line 7 of file Edge.py.

6.9.2 Constructor & Destructor Documentation

6.9.2.1 def irna::David2tulip::Edge::Edge::__init__ (*self, node1, node2*)

Instanciate Edge object.

Parameters

node1,:	sRNA node
node2,:	mRNA node

Definition at line 15 of file Edge.py.

6.9.3 Member Function Documentation

6.9.3.1 def irna::David2tulip::Edge::Edge::__cmp__ (*self, other*)

General method to compare edge based on the name of nodes.

Parameters

other,:	Compared value

Definition at line 43 of file Edge.py.

Referenced by println().

6.9.3.2 def irna::David2tulip::Edge::Edge::println (*self*)

Print edge value.

Returns

: String converted values

Definition at line 33 of file Edge.py.

References __cmp__(), node1, and node2.

6.9.4 Member Data Documentation

6.9.4.1 irna::David2tulip::Edge::Edge::category

Definition at line 15 of file Edge.py.

6.9.4.2 irna::David2tulip::Edge::Edge::categoryName

Definition at line 15 of file Edge.py.

6.9.4.3 irna::David2tulip::Edge::Edge::dbrec

Definition at line 33 of file Edge.py.

6.9.4.4 irna::David2tulip::Edge::Edge::mRNA_deb

Definition at line 15 of file Edge.py.

6.9.4.5 irna::David2tulip::Edge::Edge::mRNA_end

Definition at line 15 of file Edge.py.

6.9.4.6 irna::David2tulip::Edge::Edge::node1

Definition at line 15 of file Edge.py.

Referenced by println().

6.9.4.7 irna::David2tulip::Edge::Edge::node2

Definition at line 15 of file Edge.py.

Referenced by println().

6.9.4.8 irna::David2tulip::Edge::Edge::pValue

Definition at line 15 of file Edge.py.

Referenced by irna::iRNA_stat::Files::Files::case(), irna::David2tulip::Files::Files::data_format(), irna::iRNA_stat::Files::Files::data_format(), irna::iRNA_stat::Files::Files::getfiles(), and irna::David2tulip::Files::Files::getfiles().

6.9.4.9 irna::David2tulip::Edge::Edge::similarity

Definition at line 15 of file Edge.py.

Referenced by irna::David2tulip::Files::Files::data_format(), and irna::David2tulip::Files::Files::getfiles().

6.9.4.10 irna::David2tulip::Edge::Edge::sRNA_deb

Definition at line 15 of file Edge.py.

6.9.4.11 irna::David2tulip::Edge::Edge::sRNA_end

Definition at line 15 of file Edge.py.

6.9.4.12 irna::David2tulip::Edge::Edge::termName

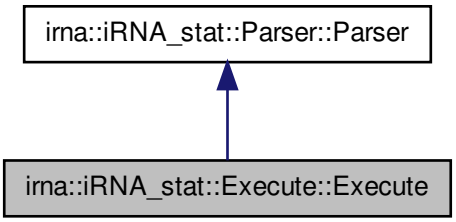
Definition at line 15 of file Edge.py.

The documentation for this class was generated from the following file:

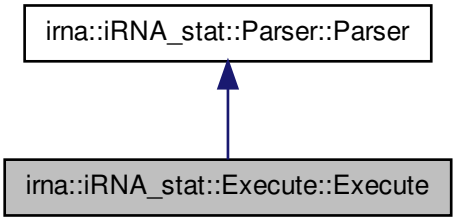
- /home/amine/workspace/iRNA/irna/David2tulip/Edge.py

6.10 irna::iRNA_stat::Execute::Execute Class Reference

Inheritance diagram for irna::iRNA_stat::Execute::Execute:



Collaboration diagram for irna::iRNA_stat::Execute::Execute:



Public Member Functions

- def __init__

  Instanciate Execute object.
- def getExecinf

  Parse exection information file.

Public Attributes

- soft
- duration

6.10.1 Detailed Description

Definition at line 11 of file Execute.py.

6.10.2 Constructor & Destructor Documentation

6.10.2.1 def irna::iRNA_stat::Execute::Execute::__init__ (*self*, *exec_file*)

Instanciate Execute object.

Definition at line 18 of file Execute.py.

References getExecinf().

6.10.3 Member Function Documentation

6.10.3.1 def irna::iRNA_stat::Execute::Execute::getExecinf (*self, exec_file*)

Parse exection information file.

Parameters

exec_file,:	Execution file

Definition at line 27 of file Execute.py.

Referenced by __init__().

6.10.4 Member Data Documentation

6.10.4.1 irna::iRNA_stat::Execute::Execute::duration

Definition at line 27 of file Execute.py.

6.10.4.2 irna::iRNA_stat::Execute::Execute::soft

Definition at line 27 of file Execute.py.

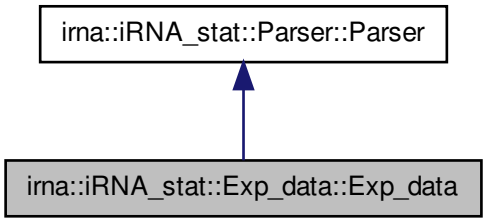
Referenced by irna::iRNA_stat::Threshold::Threshold::getSoftnum().

The documentation for this class was generated from the following file:

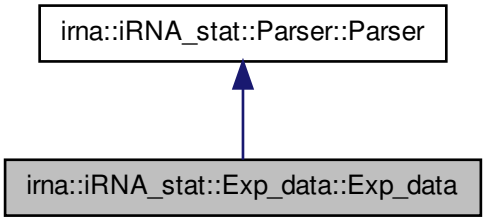
- /home/amine/workspace/iRNA/irna/iRNA_stat/Execute.py

6.11 irna::iRNA_stat::Exp_data::Exp_data Class Reference

Inheritance diagram for irna::iRNA_stat::Exp_data::Exp_data:



Collaboration diagram for irna::iRNA_stat::Exp_data::Exp_data:



Public Member Functions

- def __init__

  Instanciate Exp_data object.
- def getExpinf

  Parse experiment file.
- def getExpPair

  Get the experimental experience for one sRNA-mRNA interaction.

Public Attributes

- combined
- sRNA
- mRNA
- sRNA_deb
- sRNA_fin
- mRNA_deb
- mRNA_fin
- lenexp_data

6.11.1 Detailed Description

Definition at line 10 of file Exp_data.py.

6.11.2 Constructor & Destructor Documentation

6.11.2.1 def irna::iRNA_stat::Exp_data::Exp_data::__init__ (*self, exp_file*)

Instanciate Exp_data object.

Definition at line 17 of file Exp_data.py.

References getExpinf().

6.11.3 Member Function Documentation

6.11.3.1 def irna::iRNA_stat::Exp_data::Exp_data::getExpinf (*self, exp_file*)

Parse experiment file.

Parameters

exp_file,:	Experiment file

Definition at line 26 of file Exp_data.py.

Referenced by __init__().

6.11.3.2 def irna::iRNA_stat::Exp_data::Exp_data::getExpPair (*self, sRNA, mRNA*)

Get the experimental experience for one sRNA-mRNA interaction.

Parameters

sRNA,:	name of sRNA
mRNA,:	name of mRNA

Definition at line 56 of file Exp_data.py.

6.11.4 Member Data Documentation

6.11.4.1 irna::iRNA_stat::Exp_data::Exp_data::combined

Definition at line 26 of file Exp_data.py.

Referenced by irna::iRNA_stat::Rand_data::Rand_data::getallSofts().

6.11.4.2 irna::iRNA_stat::Exp_data::Exp_data::lenexp_data

Definition at line 26 of file Exp_data.py.

6.11.4.3 irna::iRNA_stat::Exp_data::Exp_data::mRNA

Definition at line 26 of file Exp_data.py.

6.11.4.4 irna::iRNA_stat::Exp_data::Exp_data::mRNA_deb

Definition at line 26 of file Exp_data.py.

6.11.4.5 irna::iRNA_stat::Exp_data::Exp_data::mRNA_fin

Definition at line 26 of file Exp_data.py.

6.11.4.6 irna::iRNA_stat::Exp_data::Exp_data::sRNA

Definition at line 26 of file Exp_data.py.

6.11.4.7 irna::iRNA_stat::Exp_data::Exp_data::sRNA_deb

Definition at line 26 of file Exp_data.py.

6.11.4.8 irna::iRNA_stat::Exp_data::Exp_data::sRNA_fin

Definition at line 26 of file Exp_data.py.

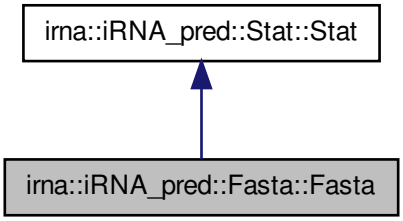
The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Exp_data.py

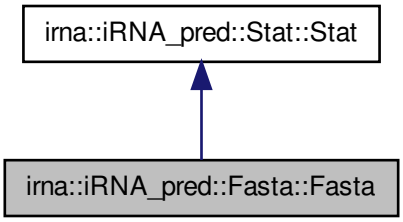
6.12 irna::iRNA_pred::Fasta::Fasta Class Reference

: Write fasta needed for the different software from a multifasta

Inheritance diagram for irna::iRNA_pred::Fasta::Fasta:



Collaboration diagram for irna::iRNA_pred::Fasta::Fasta:



Public Member Functions

- def __init__

  Build fasta object.
- def WriteFasta

  Write the fasta.
- def EmptyRep

  Empty the folder of fasta files.
- def ExtractFasta

Public Attributes

- cacheFasta

- fastafile

Static Public Attributes

- tuple regex = re.compile("^>(\S+)\s*\S*")
- tuple regex_seq = re.compile("^[ATGCatgc]+\S*")
- tuple multifasta = open(mf, "r")
- cacheData = False
- tuple a = regex.match(i)
- tuple seqname = a.group(1)

6.12.1 Detailed Description

: Write fasta needed for the different software from a multifasta

Definition at line 15 of file Fasta.py.

6.12.2 Constructor & Destructor Documentation

6.12.2.1 def irna::iRNA_pred::Fasta::Fasta::__init__ (*self*)

Build fasta object.

Reimplemented from irna::iRNA_pred::Stat::Stat.

Definition at line 21 of file Fasta.py.

6.12.3 Member Function Documentation

6.12.3.1 def irna::iRNA_pred::Fasta::Fasta::EmptyRep (*self, fasta_out*)

Empty the folder of fasta files.

Parameters

fasta_out,:	Fasta repertory

Definition at line 49 of file Fasta.py.

References ExtractFasta().

Referenced by ExtractFasta(), and WriteFasta().

6.12.3.2 def irna::iRNA_pred::Fasta::Fasta::ExtractFasta (*self, mf, fasta_out*)

Definition at line 64 of file Fasta.py.

References EmptyRep(), irna::iRNA_pred::RanRNA::RanRNA::GC, irna::iRNA_pred::-

RanRNA::RanRNA::NbSeq, and irna::iRNA_pred::Stat::Stat::openSeqInf().

Referenced by EmptyRep().

6.12.3.3 def irna::iRNA_pred::Fasta::Fasta::WriteFasta (*self*)

Write the fasta.

Definition at line 33 of file Fasta.py.

References cacheFasta, EmptyRep(), and fastafile.

Referenced by irna::iRNA_pred::RanRNA::RanRNA::WriteFasta().

6.12.4 Member Data Documentation

6.12.4.1 tuple irna::iRNA_pred::Fasta::Fasta::a = regex.match(i) [static]

Definition at line 89 of file Fasta.py.

6.12.4.2 irna::iRNA_pred::Fasta::Fasta::cacheData = False [static]

Definition at line 87 of file Fasta.py.

6.12.4.3 irna::iRNA_pred::Fasta::Fasta::cacheFasta

Definition at line 21 of file Fasta.py.

Referenced by WriteFasta().

6.12.4.4 irna::iRNA_pred::Fasta::Fasta::fastafile

Definition at line 21 of file Fasta.py.

Referenced by WriteFasta(), and irna::iRNA_pred::RanRNA::RanRNA::WriteFasta().

6.12.4.5 tuple irna::iRNA_pred::Fasta::Fasta::multifasta = open(mf, "r") [static]

Definition at line 85 of file Fasta.py.

6.12.4.6 tuple irna::iRNA_pred::Fasta::Fasta::regex = re.compile("^>(\S+)\s*\S*") [static]

```
Extract multifasta to fasta.
@param mf: Multifasta file
@param fasta_out: Fasta repertory
```

Definition at line 81 of file Fasta.py.

6.12.4.7 tuple irna::iRNA_pred::Fasta::Fasta::regex_seq = re.compile("^[ATGCatgc]+\S*") [static]

Definition at line 82 of file Fasta.py.

6.12.4.8 tuple irna::iRNA_pred::Fasta::Fasta::seqname = a.group(1) [static]

Definition at line 91 of file Fasta.py.

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_pred/Fasta.py

6.13 irna::David2tulip::Files::Files Class Reference

Public Member Functions

- def __init__

  Instanciate Files object.
- def usage

  Give information to use Mycarn.
- def case

  Test if necessary document are available.
- def data_format

  Check if information are correct.
- def getfiles

  Determine the files provided as arguments.

Public Attributes

- multilist
- filter
- similarity
- pValue
- results
- david
- interact
- enrichment
- fastmode
- iRNA_db
- config
- name

6.13.1 Detailed Description

Definition at line 10 of file Files.py.

6.13.2 Constructor & Destructor Documentation

6.13.2.1 def irna::David2tulip::Files::Files::__init__ (*self*)

Instanciate Files object.

Definition at line 16 of file Files.py.

6.13.3 Member Function Documentation

6.13.3.1 def irna::David2tulip::Files::Files::case (*self*)

Test if necessary document are available.

Parameters

operation,:	list of options called
fasta,:	list fasta related information
predict,:	list comparison related information

Definition at line 66 of file Files.py.

References data_format(), results, and usage().

Referenced by irna::iRNA_seq::Files::Files::getfiles(), irna::iRNA_stat::Files::Files::getfiles(), getfiles(), irna::iRNA_pred::Files::Files::getfiles(), and usage().

6.13.3.2 def irna::David2tulip::Files::Files::data_format (*self*)

Check if information are correct.

Definition at line 77 of file Files.py.

References irna::David2tulip::Davidconfig::Davidconfig::config, config, david, enrichment, filter, getfiles(), interact, iRNA_db, multilist, name, irna::David2tulip::Edge::Edge::pValue, pValue, results, irna::David2tulip::Edge::Edge::similarity, similarity, and usage().

Referenced by case(), irna::iRNA_seq::Files::Files::getfiles(), irna::iRNA_stat::Files::Files::getfiles(), getfiles(), and irna::iRNA_pred::Files::Files::getfiles().

6.13.3.3 def irna::David2tulip::Files::Files::getfiles (*self*)

Determine the files provided as arguments.

Returns

: Choosen options

Definition at line 131 of file Files.py.

References case(), irna::David2tulip::Davidconfig::Davidconfig::config, config, data_format(), david, enrichment, fastmode, filter, interact, iRNA_db, multilist, name, irna::David2tulip::Edge::Edge::pValue, pValue, results, irna::David2tulip::Edge::Edge::similarity, similarity, and usage().

Referenced by data_format().

6.13.3.4 def irna::David2tulip::Files::Files::usage (*self, info*)

Give information to use Mycarn.

Parameters

info,:	Error texte

Returns

: Use of Mycarn

Definition at line 37 of file Files.py.

References case(), multilist, and usage().

Referenced by irna::iRNA_seq::Files::Files::case(), case(), irna::iRNA_stat::Files::Files::case(), irna::iRNA_pred::Files::Files::case(), irna::iRNA_seq::Files::Files::data_format(), data_format(), irna::iRNA_stat::Files::Files::data_format(), irna::iRNA_pred::Files::Files::data_format(), irna::iRNA_seq::Files::Files::getfiles(), irna::iRNA_stat::Files::Files::getfiles(), getfiles(), irna::iRNA_pred::Files::Files::getfiles(), irna::iRNA_seq::Files::Files::usage(), irna::iRNA_pred::Files::Files::usage(), usage(), and irna::iRNA_stat::Files::Files::usage().

6.13.4 Member Data Documentation

6.13.4.1 irna::David2tulip::Files::Files::config

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

6.13.4.2 irna::David2tulip::Files::Files::david

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

6.13.4.3 irna::David2tulip::Files::Files::enrichment

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

6.13.4.4 irna::David2tulip::Files::Files::fastmode

Definition at line 16 of file Files.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::disconnectDB(), irna::David2tulip::Sqlite_manager::Sqlite_manager::disconnectDB(), irna::iRNA_stat::Files::Files::getfiles(), getfiles(), and irna::iRNA_pred::Files::Files::getfiles().

6.13.4.5 irna::David2tulip::Files::Files::filter

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

6.13.4.6 irna::David2tulip::Files::Files::interact

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

6.13.4.7 irna::David2tulip::Files::Files::iRNA_db

Definition at line 16 of file Files.py.

Referenced by irna::iRNA_stat::Files::Files::case(), data_format(), irna::iRNA_stat::Files::Files::getfiles(), getfiles(), and irna::iRNA_stat::Files::Files::usage().

6.13.4.8 irna::David2tulip::Files::Files::multilist

Definition at line 16 of file Files.py.

Referenced by data_format(), getfiles(), and usage().

6.13.4.9 irna::David2tulip::Files::Files::name

Definition at line 16 of file Files.py.

Referenced by data_format(), getfiles(), irna::iRNA_pred::Mpi::Mpi::Mpi_getmyrank(), irna::David2tulip::Node::Node::printgroupdata(), and irna::David2tulip::Node::Node::println().

6.13.4.10 irna::David2tulip::Files::Files::pValue

Definition at line 16 of file Files.py.

Referenced by irna::iRNA_stat::Files::Files::case(), data_format(), irna::iRNA_stat::-Files::Files::data_format(), irna::iRNA_stat::Files::Files::getfiles(), and getfiles().

6.13.4.11 irna::David2tulip::Files::Files::results

Definition at line 16 of file Files.py.

Referenced by irna::iRNA_seq::Files::Files::case(), case(), irna::iRNA_stat::Files::-Files::case(), irna::iRNA_seq::Files::Files::data_format(), data_format(), irna::iRNA_-stat::Files::Files::data_format(), irna::iRNA_seq::Files::Files::getfiles(), irna::iRNA_stat-::Files::Files::getfiles(), and getfiles().

6.13.4.12 irna::David2tulip::Files::Files::similarity

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/David2tulip/Files.py

6.14 irna::iRNA_pred::Files::Files Class Reference

:

Public Member Functions

- def __init__

  Instanciate Files object.
- def usage

  Give information to use Mycarn.
- def case

  Test if necessary document are available.
- def data_format

  Check if information are correct.
- def getfiles

  Determine the files provided as arguments.

Public Attributes

- myrank
- operation
- fasta
- predict
- random
- fastmode

6.14.1 Detailed Description

:

Definition at line 13 of file Files.py.

6.14.2 Constructor & Destructor Documentation

6.14.2.1 def irna::iRNA_pred::Files::Files::__init__ (*self, myrank*)

Instanciate Files object.

Definition at line 19 of file Files.py.

6.14.3 Member Function Documentation

6.14.3.1 def irna::iRNA_pred::Files::Files::case (*self*)

Test if necessary document are available.

Parameters

operation,:	list of options called
fasta,:	list fasta related information
predict,:	list comparison related information

Definition at line 78 of file Files.py.

References data_format(), fasta, operation, predict, random, usage(), and irna::David2tulip::Files::Files::usage().

Referenced by irna::iRNA_seq::Files::Files::getfiles(), irna::iRNA_stat::Files::Files::getfiles(), getfiles(), and usage().

6.14.3.2 def irna::iRNA_pred::Files::Files::data_format (*self*)

Check if information are correct.

Definition at line 130 of file Files.py.

References fasta, getfiles(), operation, predict, random, usage(), and irna::David2tulip::Files::Files::usage().

Referenced by case(), irna::iRNA_seq::Files::Files::getfiles(), irna::iRNA_stat::Files::Files::getfiles(), and getfiles().

6.14.3.3 def irna::iRNA_pred::Files::Files::getfiles (*self*)

Determine the files provided as arguments.

Returns

: Choosen options

Definition at line 166 of file Files.py.

References irna::David2tulip::Files::Files::case(), case(), irna::David2tulip::Files::Files::data_format(), data_format(), fasta, irna::David2tulip::Files::Files::fastmode, fastmode, irna::David2tulip::Sqlite_manager::Sqlite_manager::fastmode, myrank, operation, predict, random, usage(), and irna::David2tulip::Files::Files::usage().

Referenced by data_format().

6.14.3.4 def irna::iRNA_pred::Files::Files::usage (*self, info*)

Give information to use Mycarn.

Parameters

info,:	Error texte

Returns

: Use of Mycarn

Definition at line 36 of file Files.py.

References case(), operation, usage(), and irna::David2tulip::Files::Files::usage().

Referenced by irna::iRNA_seq::Files::Files::case(), irna::iRNA_stat::Files::Files::case(), case(), irna::iRNA_seq::Files::Files::data_format(), irna::iRNA_stat::Files::Files::data_format(), data_format(), irna::iRNA_seq::Files::Files::getfiles(), irna::iRNA_stat::Files::Files::getfiles(), getfiles(), irna::iRNA_seq::Files::Files::usage(), usage(), and irna::iRNA_stat::Files::Files::usage().

6.14.4 Member Data Documentation

6.14.4.1 irna::iRNA_pred::Files::Files::fasta

Definition at line 19 of file Files.py.

Referenced by case(), data_format(), and getfiles().

6.14.4.2 irna::iRNA_pred::Files::Files::fastmode

Definition at line 19 of file Files.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::disconnectDB(), irna::iRNA_stat::Files::Files::getfiles(), and getfiles().

6.14.4.3 irna::iRNA_pred::Files::Files::myrank

Definition at line 19 of file Files.py.

Referenced by getfiles(), irna::iRNA_pred::Mpi::Mpi::Mpi_end_processus(), irna::iRNA_pred::Mpi::Mpi::Mpi_getnprocs(), and irna::iRNA_pred::Mpi::Mpi::Mpi_slave().

6.14.4.4 irna::iRNA_pred::Files::Files::operation

Definition at line 19 of file Files.py.

Referenced by case(), data_format(), getfiles(), and usage().

6.14.4.5 irna::iRNA_pred::Files::Files::predict

Definition at line 19 of file Files.py.

Referenced by case(), data_format(), and getfiles().

6.14.4.6 irna::iRNA_pred::Files::Files::random

Definition at line 19 of file Files.py.

Referenced by irna::iRNA_stat::Files::Files::case(), case(), data_format(), irna::iRNA_stat::Files::Files::getfiles(), and getfiles().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_pred/Files.py

6.15 irna::iRNA_stat::Files::Files Class Reference

Public Member Functions

- def __init__

  Instanciate Files object.
- def usage

Give information to use iRNA_stat.

- def case

  Test if necessary document are available.

- def data_format

  Check if information are correct.

- def getfiles

  Determine the files provided as arguments.

Public Attributes

- iRNA_db
- soft_inf
- rand_inf
- exp_inf
- random
- save
- results
- exec_inf
- thres_inf
- myrank
- overwrite
- fastmode
- pValue

6.15.1 Detailed Description

Definition at line 10 of file Files.py.

6.15.2 Constructor & Destructor Documentation

6.15.2.1 def irna::iRNA_stat::Files::Files::__init__ (*self, myrank*)

Instanciate Files object.

Definition at line 16 of file Files.py.

6.15.3 Member Function Documentation

6.15.3.1 def irna::iRNA_stat::Files::Files::case (*self*)

Test if necessary document are available.

Parameters

operation,:	list of options called
fasta,:	list fasta related information
predict,:	list comparison related information

Definition at line 70 of file Files.py.

References data_format(), irna::David2tulip::Files::Files::iRNA_db, iRNA_db, irna::David2tulip::Edge::Edge::pValue, pValue, irna::David2tulip::Files::Files::pValue, irna::iRNA_stat::Computer::Computer::pValue, random, irna::iRNA_pred::Files::Files::random, results, irna::David2tulip::Files::Files::results, irna::iRNA_seq::Files::Files::results, soft_inf, irna::iRNA_seq::Files::Files::usage(), irna::iRNA_pred::Files::Files::usage(), irna::David2tulip::Files::Files::usage(), and usage().

Referenced by getfiles(), and usage().

6.15.3.2 def irna::iRNA_stat::Files::Files::data_format (*self*)

Check if information are correct.

Definition at line 85 of file Files.py.

References exec_inf, exp_inf, getfiles(), irna::David2tulip::Edge::Edge::pValue, pValue, irna::David2tulip::Files::Files::pValue, irna::iRNA_stat::Computer::Computer::pValue, rand_inf, irna::iRNA_seq::Files::Files::results, irna::David2tulip::Files::Files::results, results, save, soft_inf, thres_inf, irna::iRNA_seq::Files::Files::usage(), irna::iRNA_pred::Files::Files::usage(), irna::David2tulip::Files::Files::usage(), and usage().

Referenced by case(), and getfiles().

6.15.3.3 def irna::iRNA_stat::Files::Files::getfiles (*self*)

Determine the files provided as arguments.

Returns

: Choosen options

Definition at line 121 of file Files.py.

References irna::iRNA_seq::Files::Files::case(), irna::David2tulip::Files::Files::case(), case(), irna::iRNA_pred::Files::Files::case(), irna::iRNA_seq::Files::Files::data_format(), irna::David2tulip::Files::Files::data_format(), data_format(), irna::iRNA_pred::Files::Files::data_format(), exec_inf, exp_inf, irna::David2tulip::Files::Files::fastmode, fastmode, irna::iRNA_pred::Files::Files::fastmode, irna::David2tulip::Sqlite_manager::Sqlite_manager::fastmode, irna::iRNA_pred::Sqlite_manager::Sqlite_manager::fastmode, irna::David2tulip::Files::Files::iRNA_db, iRNA_db, overwrite, irna::David2tulip::Edge::Edge::pValue, pValue, irna::David2tulip::Files::Files::pValue, irna::iRNA_stat::Computer::Computer::pValue, rand_inf, random, irna::iRNA_pred::Files::Files::random, irna::David2tulip::Files::Files::results, irna::iRNA_seq::Files::Files::results, results, save, soft_inf, thres_inf, irna::iRNA_seq::Files::Files::usage(), irna::iRNA_pred::Files::Files::usage(), irna::David2tulip::Files::Files::usage(), and usage().

Referenced by data_format().

6.15.3.4 def irna::iRNA_stat::Files::Files::usage (*self, info*)

Give information to use iRNA_stat.

Parameters

info,:	Error texte

Returns

: Use of Mycarn

Definition at line 38 of file Files.py.

References case(), irna::David2tulip::Files::Files::iRNA_db, iRNA_db, irna::iRNA_seq-::Files::Files::usage(), irna::iRNA_pred::Files::Files::usage(), irna::David2tulip::Files::-Files::usage(), and usage().

Referenced by case(), data_format(), getfiles(), and usage().

6.15.4 Member Data Documentation

6.15.4.1 irna::iRNA_stat::Files::Files::exec_inf

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

6.15.4.2 irna::iRNA_stat::Files::Files::exp_inf

Definition at line 16 of file Files.py.

Referenced by data_format(), getfiles(), and irna::iRNA_stat::Interaction::Interaction::-Interaction_data().

6.15.4.3 irna::iRNA_stat::Files::Files::fastmode

Definition at line 16 of file Files.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB(), and getfiles().

6.15.4.4 irna::iRNA_stat::Files::Files::iRNA_db

Definition at line 16 of file Files.py.

Referenced by case(), getfiles(), and usage().

6.15.4.5 irna::iRNA_stat::Files::Files::myrank

Definition at line 16 of file Files.py.

6.15.4.6 irna::iRNA_stat::Files::Files::overwrite

Definition at line 16 of file Files.py.

Referenced by getfiles().

6.15.4.7 irna::iRNA_stat::Files::Files::pValue

Definition at line 16 of file Files.py.

Referenced by case(), data_format(), and getfiles().

6.15.4.8 irna::iRNA_stat::Files::Files::rand_inf

Definition at line 16 of file Files.py.

Referenced by data_format(), getfiles(), and irna::iRNA_stat::pValue::pValue::run().

6.15.4.9 irna::iRNA_stat::Files::Files::random

Definition at line 16 of file Files.py.

Referenced by case(), and getfiles().

6.15.4.10 irna::iRNA_stat::Files::Files::results

Definition at line 16 of file Files.py.

Referenced by case(), data_format(), and getfiles().

6.15.4.11 irna::iRNA_stat::Files::Files::save

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

6.15.4.12 irna::iRNA_stat::Files::Files::soft_inf

Definition at line 16 of file Files.py.

Referenced by case(), data_format(), and getfiles().

6.15.4.13 irna::iRNA_stat::Files::Files::thres_inf

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Files.py

6.16 irna::iRNA_seq::Files::Files Class Reference

Public Member Functions

- def __init__
  Instanciate Files object.
- def usage
  Give information to use iRNA_seq.
- def case
  Test if necessary document are available.
- def data_format
  Check if information are correct.
- def getfiles
  Determine the files provided as arguments.

Public Attributes

- genbank
- results
- sRNA_file
- begin
- end
- nucleo
- complete

6.16.1 Detailed Description

Definition at line 10 of file Files.py.

6.16.2 Constructor & Destructor Documentation

6.16.2.1 def irna::iRNA_seq::Files::Files::__init__ (*self*)

Instanciate Files object.

Definition at line 16 of file Files.py.

6.16.3 Member Function Documentation

6.16.3.1 def irna::iRNA_seq::Files::Files::case (*self*)

Test if necessary document are available.

Parameters

operation,:	list of options called
fasta,:	list fasta related information
predict,:	list comparison related information

Definition at line 55 of file Files.py.

References begin, data_format(), end, results, irna::David2tulip::Files::Files::results, usage(), irna::iRNA_pred::Files::Files::usage(), and irna::David2tulip::Files::Files::usage().

Referenced by getfiles(), irna::iRNA_stat::Files::Files::getfiles(), and usage().

6.16.3.2 def irna::iRNA_seq::Files::Files::data_format (*self*)

Check if information are correct.

Definition at line 68 of file Files.py.

References genbank, getfiles(), results, irna::David2tulip::Files::Files::results, sRNA_file, usage(), irna::iRNA_pred::Files::Files::usage(), and irna::David2tulip::Files::Files::usage().

Referenced by case(), getfiles(), and irna::iRNA_stat::Files::Files::getfiles().

6.16.3.3 def irna::iRNA_seq::Files::Files::getfiles (*self*)

Determine the files provided as arguments.

Returns

: Choosen options

Definition at line 91 of file Files.py.

References begin, case(), irna::David2tulip::Files::Files::case(), irna::iRNA_pred::Files::Files::case(), complete, data_format(), irna::David2tulip::Files::Files::data_format(), irna::iRNA_pred::Files::Files::data_format(), end, genbank, irna::David2tulip::Files::Files::results, results, sRNA_file, usage(), irna::iRNA_pred::Files::Files::usage(), and irna::David2tulip::Files::Files::usage().

Referenced by data_format().

6.16.3.4 def irna::iRNA_seq::Files::Files::usage (*self, info*)

Give information to use iRNA_seq.

Parameters

info,:	Error texte

Returns

: Use of Mycarn

Definition at line 32 of file Files.py.

References case(), genbank, usage(), irna::iRNA_pred::Files::Files::usage(), and irna::David2tulip::Files::Files::usage().

Referenced by case(), irna::iRNA_stat::Files::Files::case(), data_format(), irna::iRNA_stat::Files::Files::data_format(), getfiles(), irna::iRNA_stat::Files::Files::getfiles(), usage(), and irna::iRNA_stat::Files::Files::usage().

6.16.4 Member Data Documentation

6.16.4.1 irna::iRNA_seq::Files::Files::begin

Definition at line 16 of file Files.py.

Referenced by case(), and getfiles().

6.16.4.2 irna::iRNA_seq::Files::Files::complete

Definition at line 16 of file Files.py.

Referenced by getfiles().

6.16.4.3 irna::iRNA_seq::Files::Files::end

Definition at line 16 of file Files.py.

Referenced by case(), and getfiles().

6.16.4.4 irna::iRNA_seq::Files::Files::genbank

Definition at line 16 of file Files.py.

Referenced by data_format(), getfiles(), and usage().

6.16.4.5 irna::iRNA_seq::Files::Files::nucleo

Definition at line 16 of file Files.py.

6.16.4.6 irna::iRNA_seq::Files::Files::results

Definition at line 16 of file Files.py.

Referenced by case(), irna::iRNA_stat::Files::Files::case(), data_format(), irna::iRNA_-stat::Files::Files::data_format(), getfiles(), and irna::iRNA_stat::Files::Files::getfiles().

6.16.4.7 irna::iRNA_seq::Files::Files::sRNA_file

Definition at line 16 of file Files.py.

Referenced by data_format(), and getfiles().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_seq/Files.py

6.17 irna::iRNA_seq::Genbank::Genbank Class Reference

Public Member Functions

- def __init__

  Instanciate Genbank object.
- def readGenbank

  Read Genbank file and save into a set of readlines.
- def getGenes

  Get genes data.
- def getDNA

  Read DNA sequence and transform into string.
- def getOrganism

  Get organism name.
- def setdata

  Add genbank information.

Public Attributes

- genbankString

6.17.1 Detailed Description

Definition at line 9 of file Genbank.py.

6.17.2 Constructor & Destructor Documentation

6.17.2.1 def irna::iRNA_seq::Genbank::Genbank::__init__ (*self, genbank_file*)

Instanciate Genbank object.

Definition at line 15 of file Genbank.py.

6.17.3 Member Function Documentation

6.17.3.1 def irna::iRNA_seq::Genbank::Genbank::getDNA (*self*)

Read DNA sequence and transform into string.

Parameters

nom_fichier,:	File
ADN,:	DNA string

Definition at line 82 of file Genbank.py.

References genbankString, and getOrganism().

Referenced by getGenes(), and getOrganism().

6.17.3.2 def irna::iRNA_seq::Genbank::Genbank::getGenes (*self*)

Get genes data.

Returns

: List of dictionnary with all genes data

Definition at line 40 of file Genbank.py.

References genbankString, and getDNA().

Referenced by getOrganism(), and readGenbank().

6.17.3.3 def irna::iRNA_seq::Genbank::Genbank::getOrganism (*self*)

Get organism name.

Definition at line 100 of file Genbank.py.

References genbankString, getDNA(), getGenes(), and setdata().

Referenced by getDNA(), and setdata().

6.17.3.4 def irna::iRNA_seq::Genbank::Genbank::readGenbank (*self, genbank_file*)

Read Genbank file and save into a set of readlines.

Parameters

genbank_file,:	Path to Genbank file

Returns

: List contening Genbank text

Definition at line 25 of file Genbank.py.

References getGenes().

6.17.3.5 def irna::iRNA_seq::Genbank::Genbank::setdata (*self, organism, list_genes, DNA*)

Add genbank information.

Parameters

organism,:	
list_genes,:	
DNA,:	

Returns

:

Definition at line 115 of file Genbank.py.

References getOrganism().

Referenced by getOrganism().

6.17.4 Member Data Documentation

6.17.4.1 irna::iRNA_seq::Genbank::Genbank::genbankString

Definition at line 15 of file Genbank.py.

Referenced by getDNA(), getGenes(), and getOrganism().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_seq/Genbank.py

6.18 irna::David2tulip::Gene_list::Gene_list Class Reference

: Handle DAVID enrichment data

Public Member Functions

- def __init__

  Instanciate Gene_list object.

Public Attributes

- sRNA
- categoryName
- geneIds
- termName

6.18.1 Detailed Description

: Handle DAVID enrichment data

Author

: Amine Ghozlane

Version

: 1.0

Definition at line 7 of file Gene_list.py.

6.18.2 Constructor & Destructor Documentation

6.18.2.1 def irna::David2tulip::Gene_list::Gene_list::__init__ (*self, sudsobject, sRNA*)

Instanciate Gene_list object.

Parameters

sudsobject,:	suds object
sRNA,:	Name of the sRNA

Definition at line 15 of file Gene_list.py.

6.18.3 Member Data Documentation

6.18.3.1 irna::David2tulip::Gene_list::Gene_list::categoryName

Definition at line 15 of file Gene_list.py.

6.18.3.2 irna::David2tulip::Gene_list::Gene_list::geneIds

Definition at line 15 of file Gene_list.py.

6.18.3.3 irna::David2tulip::Gene_list::Gene_list::sRNA

Definition at line 15 of file Gene_list.py.

6.18.3.4 irna::David2tulip::Gene_list::Gene_list::termName

Definition at line 15 of file Gene_list.py.

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/David2tulip/Gene_list.py

6.19 irna::David2tulip::Graph::Graph Class Reference

Public Member Functions

- def __init__

  Instanciate graph object.
- def parse

  Parse and information to node and edge objects.
- def printnodes

  Write nodes csv.
- def getCategories

  Get active categories.
- def getNumCategory

  Get the position of on element in a list.
- def verif

  Verif value for sRNA_100.
- def filterTermName

  Detect the method to use for filtering.
- def printedges

  Write edges csv.
- def writefile

  Write node and edge csv.

Public Attributes

- node_objects
- edge_objects
- fcategoryid
- gocategoryid
- fregex
- goregex

6.19.1 Detailed Description

Definition at line 12 of file Graph.py.

6.19.2 Constructor & Destructor Documentation

6.19.2.1 def irna::David2tulip::Graph::Graph::__init__ (*self*)

Instanciate graph object.

Definition at line 18 of file Graph.py.

6.19.3 Member Function Documentation

6.19.3.1 def irna::David2tulip::Graph::Graph::filterTermName (*self, category, term*)

Detect the method to use for filtering.

Definition at line 89 of file Graph.py.

References getCategories(), and printedges().

Referenced by printedges(), and verif().

6.19.3.2 def irna::David2tulip::Graph::Graph::getCategories (*self*)

Get active categories.

Returns

: Unique categories

Definition at line 58 of file Graph.py.

References getNumCategory(), and verif().

Referenced by filterTermName(), and printnodes().

6.19.3.3 def irna::David2tulip::Graph::Graph::getNumCategory (*self, element, liste*)

Get the position of on element in a list.

Parameters

element,:	an element of the list
liste,:	a list

Definition at line 71 of file Graph.py.

References edge_objects.

Referenced by getCategories().

6.19.3.4 def irna::David2tulip::Graph::Graph::parse (*self, obj*)

Parse and information to node and edge objects.

Parameters

obj,:	Parser-linked object

Definition at line 31 of file Graph.py.

References printnodes().

6.19.3.5 def irna::David2tulip::Graph::Graph::printedges (*self, results*)

Write edges csv.

Parameters

results,:	Path to result repertory

Definition at line 108 of file Graph.py.

References edge_objects, filterTermName(), printedges(), printnodes(), and writefile().

Referenced by filterTermName(), and printedges().

6.19.3.6 def irna::David2tulip::Graph::Graph::printnodes (*self, results*)

Write nodes csv.

Parameters

results,:	Path to result repertory

Definition at line 39 of file Graph.py.

References edge_objects, getCategories(), and node_objects.

Referenced by parse(), and printedges().

6.19.3.7 def irna::David2tulip::Graph::Graph::verif (*self*)

Verif value for sRNA_100.

Definition at line 78 of file Graph.py.

References fcategoryid, filterTermName(), and gocategoryid.

Referenced by getCategories().

6.19.3.8 def irna::David2tulip::Graph::Graph::writefile (*self, results*)

Write node and edge csv.

Parameters

results,:	Path to result repertory

Definition at line 171 of file Graph.py.

Referenced by printedges().

6.19.4 Member Data Documentation

6.19.4.1 irna::David2tulip::Graph::Graph::edge_objects

Definition at line 18 of file Graph.py.

Referenced by getNumCategory(), printedges(), and printnodes().

6.19.4.2 irna::David2tulip::Graph::Graph::fcategoryid

Definition at line 18 of file Graph.py.

Referenced by verif().

6.19.4.3 irna::David2tulip::Graph::Graph::fregex

Definition at line 18 of file Graph.py.

6.19.4.4 irna::David2tulip::Graph::Graph::gocategoryid

Definition at line 18 of file Graph.py.

Referenced by verif().

6.19.4.5 irna::David2tulip::Graph::Graph::goregex

Definition at line 18 of file Graph.py.

6.19.4.6 irna::David2tulip::Graph::Graph::node_objects

Definition at line 18 of file Graph.py.

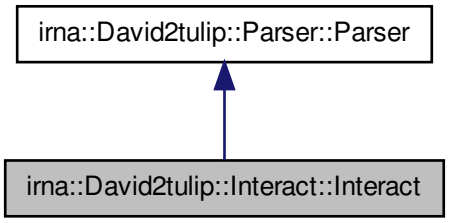
Referenced by printnodes().

The documentation for this class was generated from the following file:

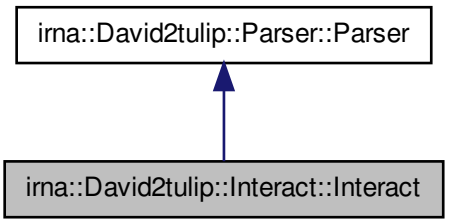
- /home/amine/workspace/iRNA/irna/David2tulip/Graph.py

6.20 irna::David2tulip::Interact::Interact Class Reference

Inheritance diagram for irna::David2tulip::Interact::Interact:



Collaboration diagram for irna::David2tulip::Interact::Interact:



Public Member Functions

- def __init__

  Instanciate similarity parser object.
- def setdata

  Add sRNA - sRNA edges based on their similarity.

Public Attributes

- interact_file

6.20.1 Detailed Description

Definition at line 10 of file Interact.py.

6.20.2 Constructor & Destructor Documentation

6.20.2.1 def irna::David2tulip::Interact::Interact::__init__ (*self, interact_file*)

Instanciate similarity parser object.

Parameters

interact_file,:	interact file

Definition at line 17 of file Interact.py.

6.20.3 Member Function Documentation

6.20.3.1 def irna::David2tulip::Interact::Interact::setdata (*self, node_objects, edge_objects*)

Add sRNA - sRNA edges based on their similarity.

Parameters

node_objects,:	list of node objects
edge_objects,:	list of edge objects

Definition at line 27 of file Interact.py.

References irna::David2tulip::Parser::Parser::getlinkedge(), and interact_file.

6.20.4 Member Data Documentation

6.20.4.1 irna::David2tulip::Interact::Interact::interact_file

Definition at line 17 of file Interact.py.

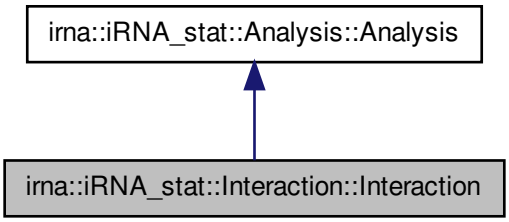
Referenced by setdata().

The documentation for this class was generated from the following file:

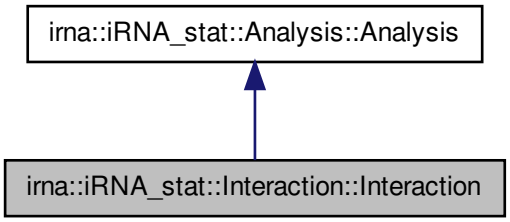
- /home/amine/workspace/iRNA/irna/David2tulip/Interact.py

6.21 irna::iRNA_stat::Interaction::Interaction Class Reference

Inheritance diagram for irna::iRNA_stat::Interaction::Interaction:



Collaboration diagram for irna::iRNA_stat::Interaction::Interaction:



Public Member Functions

- def __init__

  Instanciate Interaction object.
- def defintefunction

  Determine the function to apply depending of the type of solution.
- def intebestsol

  Case best solution.
- def inteseveralcontact

  Case several contacts score - several contacts energy.
- def inteonesol

  Case : one solution.
- def getInteraction

  Compute interaction position.
- def ncbp

  Compute the number of correctly predicted base pairings.
- def compute_ppv

  Compute PPV.
- def compute_sensitivity

  Compute sensitivity.
- def compute_sens_ppv

  Compute sensitivity and ppv of the interaction.
- def Interaction_data

  Get interaction position data.
- def run

  Compute interaction precision and sensitivity.

Public Attributes

- intefuncmap
- interactions
- type_sol
- pos
- exp_inf
- dbmanage
- ppv
- sensitivity
- classtype

6.21.1 Detailed Description

Definition at line 11 of file Interaction.py.

6.21.2 Constructor & Destructor Documentation

6.21.2.1 def irna::iRNA_stat::Interaction::Interaction::__init__ (*self, data, dbmanage, exp_inf*)

Instanciate Interaction object.

Parameters

data,:	Communication object
dbmanage,:	Access to the database
exp_inf,:	Exp_inf object

Definition at line 20 of file Interaction.py.

6.21.3 Member Function Documentation

6.21.3.1 def irna::iRNA_stat::Interaction::Interaction::compute_ppv (*self, Pinteract, Rinteract*)

Compute PPV.

Parameters

Pinteract,:	Predicted interaction position
Rinteract,:	Real interaction position

Returns

: PPV of one interation

Definition at line 143 of file Interaction.py.

References compute_sens_ppv(), and ncbp().

Referenced by getInteraction().

6.21.3.2 def irna::iRNA_stat::Interaction::Interaction::compute_sens_ppv (*self*)

Compute sensitivity and ppv of the interaction.

Definition at line 168 of file Interaction.py.

Referenced by compute_ppv(), and Interaction_data().

6.21.3.3 def irna::iRNA_stat::Interaction::Interaction::compute_sensitivity (*self, Pinteract, Rinteract*)

Compute sensitivity.

Parameters

Pinteract,:	Predicted interaction position
Rinteract,:	Real interaction position

Returns

: sensitivity of one interation

Definition at line 157 of file Interaction.py.

References irna::iRNA_stat::Computer::Computer::classtype, classtype, defintefunction(), interactions, irna::iRNA_stat::Computer::Computer::interactions, irna::iRNA_stat::Computer::Computer::ppv, ppv, irna::iRNA_stat::Computer::Computer::sensitivity, and sensitivity.

Referenced by ncbp().

6.21.3.4 def irna::iRNA_stat::Interaction::Interaction::defintefunction (*self*)

Determine the function to apply depending of the type of solution.

Definition at line 34 of file Interaction.py.

References intebestsol(), and intefuncmap.

Referenced by compute_sensitivity().

6.21.3.5 def irna::iRNA_stat::Interaction::Interaction::getInteraction (*self, posit, sRNA_deb, sRNA_end, mRNA_deb, mRNA_end, predict, intefuncpoint*)

Compute interaction position.

Parameters

posit,:	Position in the list
sRNA_deb,:	sRNA begin list
sRNA_end,:	sRNA end list
mRNA_deb,:	sRNA begin list
mRNA_end,:	mRNA end list
predict,:	Flag Predict position
intefuncpoint,:	Function pointer to analysis function

Returns

: Position selected and normalised

Definition at line 112 of file Interaction.py.

References compute_ppv(), and ncbp().

Referenced by irna::iRNA_stat::Mpi::Mpi::getpValue(), inteonesol(), and Interaction_data().

6.21.3.6 def irna::iRNA_stat::Interaction::Interaction::intebestsol (*self, posit, sRNA_deb, sRNA_end, mRNA_deb, mRNA_end*)

Case best solution.

Parameters

posit,:	Position in the list
sRNA_deb,:	sRNA begin list
sRNA_end,:	sRNA end list
mRNA_deb,:	sRNA begin list
mRNA_end,:	mRNA end list

Returns

: Position selected and normalised

Definition at line 49 of file Interaction.py.

References inteseveralcontact().

Referenced by defintefunction().

6.21.3.7 def irna::iRNA_stat::Interaction::Interaction::inteonesol (*self, posit, sRNA_deb, sRNA_end, mRNA_deb, mRNA_end*)

Case : one solution.

Parameters

posit,:	Position in the list
sRNA_deb,:	sRNA begin list
sRNA_end,:	sRNA end list
mRNA_deb,:	sRNA begin list
mRNA_end,:	mRNA end list

Returns

: Position selected and normalised

Definition at line 92 of file Interaction.py.

References getInteraction().

Referenced by inteseveralcontact().

6.21.3.8 def irna::iRNA_stat::Interaction::Interaction::Interaction_data (*self*)

Get interaction position data.

Definition at line 205 of file Interaction.py.

References compute_sens_ppv(), irna::iRNA_stat::Files::Files::exp_inf, exp_inf, getInteraction(), irna::iRNA_stat::Analysis::Analysis::getRangePosit(), Interaction_data(), pos, irna::iRNA_stat::Computer::Computer::pos, run(), type_sol, and irna::iRNA_stat::Computer::Computer::type_sol.

Referenced by Interaction_data().

6.21.3.9 def irna::iRNA_stat::Interaction::Interaction::inteseveralcontact (*self, posit, sRNA_deb, sRNA_end, mRNA_deb, mRNA_end*)

Case several contacts score - several contacts energy.

Parameters

posit,:	Position in the list
sRNA_deb,:	sRNA begin list
sRNA_end,:	sRNA end list
mRNA_deb,:	sRNA begin list
mRNA_end,:	mRNA end list

Returns

: Position selected and normalised

Definition at line 67 of file Interaction.py.

References inteonesol().

Referenced by intebestsol().

6.21.3.10 def irna::iRNA_stat::Interaction::Interaction::ncbp (*self, pRNA, rRNA*)

Compute the number of correctly predicted base pairings.

Definition at line 130 of file Interaction.py.

References compute_sensitivity(), and ncbp().

Referenced by compute_ppv(), getInteraction(), and ncbp().

6.21.3.11 def irna::iRNA_stat::Interaction::Interaction::run (*self*)

Compute interaction precision and sensitivity.

Definition at line 238 of file Interaction.py.

Referenced by Interaction_data().

6.21.4 Member Data Documentation

6.21.4.1 irna::iRNA_stat::Interaction::Interaction::classtype

Definition at line 168 of file Interaction.py.

Referenced by compute_sensitivity().

6.21.4.2 irna::iRNA_stat::Interaction::Interaction::dbmanage

Definition at line 20 of file Interaction.py.

6.21.4.3 irna::iRNA_stat::Interaction::Interaction::exp_inf

Definition at line 20 of file Interaction.py.

Referenced by Interaction_data().

6.21.4.4 irna::iRNA_stat::Interaction::Interaction::intefuncmap

Definition at line 20 of file Interaction.py.

Referenced by defintefunction().

6.21.4.5 irna::iRNA_stat::Interaction::Interaction::interactions

Definition at line 20 of file Interaction.py.

Referenced by compute_sensitivity(), irna::iRNA_stat::NormScore::NormScore::normUniqueSolution(), irna::iRNA_stat::pValue::pValue::run(), and irna::iRNA_stat::NormScore::NormScore::run().

6.21.4.6 irna::iRNA_stat::Interaction::Interaction::pos

Definition at line 20 of file Interaction.py.

Referenced by irna::iRNA_stat::NormScore::NormScore::defnormfunction(), -Interaction_data(), irna::iRNA_stat::NormScore::NormScore::normSeveralContactScore(), irna::iRNA_stat::NormScore::NormScore::normSeveralEnergy(), irna::iRNA_stat::NormScore::NormScore::normSeveralScore(), irna::iRNA_stat::NormScore::NormScore::normUniqueSolution(), and irna::iRNA_stat::NormScore::NormScore::run().

6.21.4.7 irna::iRNA_stat::Interaction::Interaction::ppv

Definition at line 168 of file Interaction.py.

Referenced by compute_sensitivity().

6.21.4.8 irna::iRNA_stat::Interaction::Interaction::sensitivity

Definition at line 168 of file Interaction.py.

Referenced by compute_sensitivity().

6.21.4.9 irna::iRNA_stat::Interaction::Interaction::type_sol

Definition at line 20 of file Interaction.py.

Referenced by irna::iRNA_stat::NormScore::NormScore::defnormfunction(), and -Interaction_data().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Interaction.py

6.22 irna::iRNA_pred::Interaction::Interaction Class Reference

: Store information on interaction.

Public Member Functions

- def __init__
  Init Interaction object.
- def setSoft
  Set software node.
- def getlastmRNA
  Get mRNA attribute.
- def getlastsRNA
  Get sRNA attribute.
- def addListOfComparison
  Add a list of comparison node.
- def addComparison
  Add a comparison node.
- def getLastchildnode
- def setScoreList
  Set ListOfComparison score.
- def getResult
- def println
  Print object data.
- def setMatrix
  Manage matrix load and format.
- def formatMatrix
  Format into integer the matrix.
- def loadMatrix
  Load the matrix of score.
- def getPosition
  Get the position on matrix.
- def scoreSequence
  Score two sequences.

Public Attributes

- root
- schema_root

Static Public Attributes

- matrix = None

6.22.1 Detailed Description

: Store information on interaction.

Definition at line 14 of file Interaction.py.

6.22.2 Constructor & Destructor Documentation

6.22.2.1 def irna::iRNA_pred::Interaction::Interaction::__init__ (*self*)

Init Interaction object.

Definition at line 21 of file Interaction.py.

6.22.3 Member Function Documentation

6.22.3.1 def irna::iRNA_pred::Interaction::Interaction::addComparison (*self, data*)

Add a comparison node.

Parameters

data,:	Comparison result

Definition at line 65 of file Interaction.py.

References getLastchildnode(), schema_root, and setScoreList().

Referenced by getlastsRNA().

6.22.3.2 def irna::iRNA_pred::Interaction::Interaction::addListOfComparison (*self, mRNA, sRNA*)

Add a list of comparison node.

Parameters

mRNA,:	mRNA id
sRNA,:	sRNA id

Definition at line 57 of file Interaction.py.

References getLastchildnode().

Referenced by getlastmRNA().

6.22.3.3 def irna::iRNA_pred::Interaction::Interaction::formatMatrix (*self, mat*)

Format into integer the matrix.

Parameters

mat,:	Matrix data in string format

Returns

: Matrix in integer format

Definition at line 118 of file Interaction.py.

Referenced by println().

6.22.3.4 def irna::iRNA_pred::Interaction::Interaction::getLastchildnode (*self*)

Returns

: The last child from root

Definition at line 73 of file Interaction.py.

References getResult(), and root.

Referenced by addComparison(), addListOfComparison(), getlastmRNA(), and setSoft().

6.22.3.5 def irna::iRNA_pred::Interaction::Interaction::getlastmRNA (*self*)

Get mRNA attribute.

Returns

: Value of mRNA attribute

Definition at line 38 of file Interaction.py.

References addListOfComparison(), getLastchildnode(), and schema_root.

6.22.3.6 def irna::iRNA_pred::Interaction::Interaction::getlastsRNA (*self*)

Get sRNA attribute.

Returns

: Value of sRNA attribute

Definition at line 47 of file Interaction.py.

References addComparison().

Referenced by setSoft().

6.22.3.7 def irna::iRNA_pred::Interaction::Interaction::getPosition (*self, letter*)

Get the position on matrix.

Parameters

letter,:	One letter in the sequence

Returns

: The position on matrix

Definition at line 158 of file Interaction.py.

References getPosition(), and matrix.

Referenced by getPosition(), and loadMatrix().

6.22.3.8 def irna::iRNA_pred::Interaction::Interaction::getResult (*self*)

Returns

: The tree in text format

Definition at line 88 of file Interaction.py.

References loadMatrix(), and setMatrix().

Referenced by getLastchildnode().

6.22.3.9 def irna::iRNA_pred::Interaction::Interaction::loadMatrix (*self, matrix*)

Load the matrix of score.

Parameters

matrix,:	Matrix file

Returns

: Matrix of score

Definition at line 133 of file Interaction.py.

References getPosition(), matrix, and scoreSequence().

Referenced by getResult(), and setMatrix().

6.22.3.10 def irna::iRNA_pred::Interaction::Interaction::println (*self*)

Print object data.

Definition at line 96 of file Interaction.py.

References formatMatrix(), and matrix.

Referenced by setScoreList().

6.22.3.11 def irna::iRNA_pred::Interaction::Interaction::scoreSequence (*self, seqs*)

Score two sequences.

Parameters

seqs,:	Table of two sequences

Returns

: The score of the alignement

Definition at line 175 of file Interaction.py.

Referenced by loadMatrix().

6.22.3.12 def irna::iRNA_pred::Interaction::Interaction::setMatrix (*self, matrix*)

Manage matrix load and format.

Parameters

matrix,:	Matrix file

Definition at line 105 of file Interaction.py.

References loadMatrix().

Referenced by getResult().

6.22.3.13 def irna::iRNA_pred::Interaction::Interaction::setScoreList (*self, score*)

Set ListOfComparison score.

Parameters

score,:	Score the whole comparison

Definition at line 81 of file Interaction.py.

References println(), and schema_root.

Referenced by addComparison().

6.22.3.14 def irna::iRNA_pred::Interaction::Interaction::setSoft (*self, soft_name, ref*)

Set software node.

Parameters

soft_name,:	Software name
ref,:	Software num

Definition at line 30 of file Interaction.py.

References getLastchildnode(), getlastsRNA(), and schema_root.

6.22.4 Member Data Documentation

6.22.4.1 irna::iRNA_pred::Interaction::Interaction::matrix = None [static]

Definition at line 15 of file Interaction.py.

Referenced by getPosition(), loadMatrix(), and println().

6.22.4.2 irna::iRNA_pred::Interaction::Interaction::root

Definition at line 21 of file Interaction.py.

Referenced by getLastchildnode().

6.22.4.3 irna::iRNA_pred::Interaction::Interaction::schema_root

Definition at line 30 of file Interaction.py.

Referenced by addComparison(), getlastmRNA(), setScoreList(), and setSoft().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_pred/Interaction.py

6.23 irna::iRNA_pred::Merger::Merger Class Reference

Merge the xml files in a sqlite database.

Public Member Functions

- def __init__

  Initiate the constructor.
- def buildTree

  Read the xml tree and copy the data into the sqlite database.
- def getData

  Parse xml tree.
- def setRNA

Parse RNA_inf file.

- def merge

  Merge mycarn xml files into a sqlite database.

Public Attributes

- repIn
- files
- softprevious

Static Public Attributes

- tuple result_data = etree.Element("result")

6.23.1 Detailed Description

Merge the xml files in a sqlite database.

Definition at line 14 of file Merger.py.

6.23.2 Constructor & Destructor Documentation

6.23.2.1 def irna::iRNA_pred::Merger::Merger::__init__ (*self, repIn*)

Initiate the constructor.

Parameters

repIn,:	Result repertory

Definition at line 23 of file Merger.py.

6.23.3 Member Function Documentation

6.23.3.1 def irna::iRNA_pred::Merger::Merger::buildTree (*self, tree, dbmanage*)

Read the xml tree and copy the data into the sqlite database.

Parameters

tree,:	xml tree parsed
dbmanage,:	Database manager

Definition at line 38 of file Merger.py.

References getData(), and softprevious.

Referenced by merge().

6.23.3.2 def irna::iRNA_pred::Merger::Merger::getData (*self, file*)

Parse xml tree.

Parameters

file,:	Result part in Xml format

Returns

: resulting tree

Definition at line 71 of file Merger.py.

References setRNA().

Referenced by buildTree(), irna::iRNA_stat::Rand_data::Rand_data::getallSofts(), and merge().

6.23.3.3 def irna::iRNA_pred::Merger::Merger::merge (*self, dbmanage*)

Merge mycarn xml files into a sqlite database.

Parameters

dbmanage,:	Database manager

Definition at line 101 of file Merger.py.

References buildTree(), getData(), and repIn.

Referenced by setRNA().

6.23.3.4 def irna::iRNA_pred::Merger::Merger::setRNA (*self, dbmanage, RNA_inf, type*)

Parse RNA_inf file.

Parameters

RNA_inf,:	Path to RNA_inf file
dbmanage,:	Access to the database
type,:	Type of RNA

Definition at line 87 of file Merger.py.

References files, and merge().

Referenced by getData().

6.23.4 Member Data Documentation

6.23.4.1 irna::iRNA_pred::Merger::Merger::files

Definition at line 23 of file Merger.py.

Referenced by setRNA().

6.23.4.2 irna::iRNA_pred::Merger::Merger::repln

Definition at line 23 of file Merger.py.

Referenced by merge().

6.23.4.3 tuple irna::iRNA_pred::Merger::Merger::result_data = etree.Element("result") [static]

Definition at line 16 of file Merger.py.

6.23.4.4 irna::iRNA_pred::Merger::Merger::softprevious

Definition at line 23 of file Merger.py.

Referenced by buildTree().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_pred/Merger.py

6.24 irna::iRNA_stat::Mpi::Mpi Class Reference

: Manage Mpi run

Public Member Functions

- def __init__
  The Constructor.
- def waiting
  Test de reduction de consommation de ressource.
- def instanciate_analysis
  Instanciate object of analysis.
- def worker
  Worker process.
- def working_step
  Defines what each worker will compute.

- def getCorrespondingSoft

  Get corresponding soft between soft_param and current database.
- def getSendCom

  Create communication object.
- def Mpi_end_processus

  End of all process.
- def Mpi_finalize

  Fin.
- def getNormScore

  Get results of score normalisation.
- def getInteraction

  Get results of the interaction analysis.
- def getInteraction_data

  Get results of the interaction analysis.
- def getpValue

  Get results of pValue analysis.
- def getRegression

  Get results of linear regression.
- def getAnalysis

  Get the analysis function to apply.
- def run

  Manage comunication and data sending.

Public Attributes

- comm
- nprocs
- myrank
- name
- setdata

6.24.1 Detailed Description

: Manage Mpi run

Definition at line 20 of file Mpi.py.

6.24.2 Constructor & Destructor Documentation

6.24.2.1 def irna::iRNA_stat::Mpi::Mpi::__init__ (*self*)

The Constructor.

Note

comm: Broadcast communicator
nprocs: Number of thread
myrank: Rank of the thread

Definition at line 28 of file Mpi.py.

6.24.3 Member Function Documentation

6.24.3.1 def irna::iRNA_stat::Mpi::Mpi::getAnalysis (*self, type_analysis*)

Get the analysis function to apply.

Definition at line 225 of file Mpi.py.

Referenced by getInteraction_data().

6.24.3.2 def irna::iRNA_stat::Mpi::Mpi::getCorrespondingSoft (*self, computer, dbmanage, rand_inf*)

Get corresponding soft between soft_param and current database.

Definition at line 117 of file Mpi.py.

References getSendCom().

Referenced by getSendCom(), and working_step().

6.24.3.3 def irna::iRNA_stat::Mpi::Mpi::getInteraction (*self, computer, tab, source, result*)

Get results of the interaction analysis.

Definition at line 194 of file Mpi.py.

References getRegression().

Referenced by getpValue(), and Mpi_finalize().

6.24.3.4 def irna::iRNA_stat::Mpi::Mpi::getInteraction_data (*self, computer, tab, source, result*)

Get results of the interaction analysis.

Definition at line 203 of file Mpi.py.

References getAnalysis(), getNormScore(), and setdata.

Referenced by getNormScore(), and getpValue().

6.24.3.5 def irna::iRNA_stat::Mpi::Mpi::getNormScore (*self, computer, tab, source, result*)

Get results of score normalisation.

Definition at line 186 of file Mpi.py.

References getInteraction_data(), and getpValue().

Referenced by getInteraction_data(), and Mpi_end_processus().

6.24.3.6 def irna::iRNA_stat::Mpi::Mpi::getpValue (*self, computer, tab, source, result*)

Get results of pValue analysis.

Definition at line 210 of file Mpi.py.

References irna::iRNA_stat::Interaction::Interaction::getInteraction(), getInteraction(), getInteraction_data(), getpValue(), getRegression(), run(), and setdata.

Referenced by getNormScore(), and getpValue().

6.24.3.7 def irna::iRNA_stat::Mpi::Mpi::getRegression (*self, computer, tab, source, result*)

Get results of linear regression.

Definition at line 217 of file Mpi.py.

References working_step().

Referenced by getInteraction(), and getpValue().

6.24.3.8 def irna::iRNA_stat::Mpi::Mpi::getSendCom (*self, computer, type_analysis, tab, dbmanage, rand_inf*)

Create communication object.

Definition at line 138 of file Mpi.py.

References getCorrespondingSoft(), Mpi_end_processus(), Mpi_finalize(), irna::iRNA_-pred::Mpi::Mpi::nprocs, and nprocs.

Referenced by getCorrespondingSoft().

6.24.3.9 def irna::iRNA_stat::Mpi::Mpi::instanciate_analysis (*self, data_obj, dbmanage, exp_inf, rand_inf*)

Instanciate object of analysis.

Parameters

data_obj,:	Comunication object
dbmanage,:	Access to the database
exp_inf,:	Experimental data
rand_inf,:	Random data

Definition at line 50 of file Mpi.py.

References waiting(), and worker().

Referenced by waiting(), and worker().

6.24.3.10 def irna::iRNA_stat::Mpi::Mpi::Mpi_end_processus (*self*)

End of all process.

Definition at line 168 of file Mpi.py.

References getNormScore().

Referenced by getSendCom().

6.24.3.11 def irna::iRNA_stat::Mpi::Mpi::Mpi_finalize (*self*)

Fin.

Definition at line 176 of file Mpi.py.

References getInteraction().

Referenced by getSendCom(), and worker().

6.24.3.12 def irna::iRNA_stat::Mpi::Mpi::run (*self, computer, type_analysis, dbmanage* = `None`, *rand_inf* = `None`)

Manage comunication and data sending.

Parameters

computer,:	Computer object
type_-analysis,:	Type of analysis

Definition at line 239 of file Mpi.py.

Referenced by getpValue().

6.24.3.13 def irna::iRNA_stat::Mpi::Mpi::waiting (*self*)

Test de reduction de consommation de ressource.

Definition at line 38 of file Mpi.py.

References instanciate_analysis().

Referenced by instanciate_analysis().

6.24.3.14 def irna::iRNA_stat::Mpi::Mpi::worker (*self, dbmanage, exp_inf, rand_inf*)

Worker process.

Parameters

dbmanage,:	Access to the database
exp_inf,:	Experimental data
rand_inf,:	Random data

Definition at line 65 of file Mpi.py.

References instanciate_analysis(), Mpi_finalize(), irna::iRNA_pred::Mpi::Mpi::Mpi_finalize(), irna::iRNA_pred::Mpi::Mpi::nprocs, nprocs, and working_step().

Referenced by instanciate_analysis().

6.24.3.15 def irna::iRNA_stat::Mpi::Mpi::working_step (*self, nbinteract*)

Defines what each worker will compute.

Parameters

nbinteract,:	Number of operation to do

Definition at line 88 of file Mpi.py.

References getCorrespondingSoft().

Referenced by getRegression(), and worker().

6.24.4 Member Data Documentation

6.24.4.1 irna::iRNA_stat::Mpi::Mpi::comm

Definition at line 28 of file Mpi.py.

6.24.4.2 irna::iRNA_stat::Mpi::Mpi::myrank

Definition at line 28 of file Mpi.py.

6.24.4.3 irna::iRNA_stat::Mpi::Mpi::name

Definition at line 28 of file Mpi.py.

6.24.4.4 irna::iRNA_stat::Mpi::Mpi::nprocs

Definition at line 28 of file Mpi.py.

Referenced by getSendCom(), and worker().

6.24.4.5 irna::iRNA_stat::Mpi::Mpi::setdata

Definition at line 225 of file Mpi.py.

Referenced by getInteraction_data(), and getpValue().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Mpi.py

6.25 irna::iRNA_pred::Mpi::Mpi Class Reference

: Manage Mpi run

Public Member Functions

- def __init__
  The Constructor.
- def Mpi_getComm
- def Mpi_getnprocs
- def Mpi_getmyrank
- def Mpi_getname
- def Mpi_write_exectime
  Write exectime of command.
- def Mpi_master
  Master process.
- def Mpi_sup_process
  Termine les processus supplementaire.
- def Mpi_getSoft
  Test if that soft has already been used.
- def Mpi_write_data
  Write xml result file.
- def Mpi_slave
  Slave process.
- def Mpi_exit_processus
  End of all process.
- def Mpi_end_processus
  End of all process.
- def Mpi_finalize
  Fin.
- def Mpi_run
  Control Mpi procedure.

Public Attributes

- comm
- nprocs
- myrank
- name

6.25.1 Detailed Description

: Manage Mpi run

Definition at line 20 of file Mpi.py.

6.25.2 Constructor & Destructor Documentation

6.25.2.1 def irna::iRNA_pred::Mpi::Mpi::__init__ (*self*)

The Constructor.

Note

comm: Broadcast communicator
nprocs: Number of thread
myrank: Rank of the thread

Definition at line 28 of file Mpi.py.

6.25.3 Member Function Documentation

6.25.3.1 def irna::iRNA_pred::Mpi::Mpi::Mpi_end_processus (*self*)

End of all process.

Definition at line 350 of file Mpi.py.

References Mpi_master(), Mpi_slave(), irna::iRNA_pred::Files::Files::myrank, and myrank.

Referenced by Mpi_master(), and Mpi_slave().

6.25.3.2 def irna::iRNA_pred::Mpi::Mpi::Mpi_exit_processus (*self*)

End of all process.

Definition at line 337 of file Mpi.py.

References Mpi_finalize(), and Mpi_run().

Referenced by Mpi_master(), and Mpi_slave().

6.25.3.3 def irna::iRNA_pred::Mpi::Mpi::Mpi_finalize (*self*)

Fin.

Definition at line 358 of file Mpi.py.

References Mpi_finalize().

Referenced by Mpi_exit_processus(), Mpi_finalize(), and irna::iRNA_stat::Mpi::Mpi-::worker().

6.25.3.4 def irna::iRNA_pred::Mpi::Mpi::Mpi_getComm (*self*)

Returns

: Communicator

Definition at line 38 of file Mpi.py.

References Mpi_getmyrank(), and nprocs.

6.25.3.5 def irna::iRNA_pred::Mpi::Mpi::Mpi_getmyrank (*self*)

Returns

: The rank value

Definition at line 52 of file Mpi.py.

References Mpi_write_exectime(), irna::David2tulip::Node::Node::name, irna::-David2tulip::Files::Files::name, and name.

Referenced by Mpi_getComm().

6.25.3.6 def irna::iRNA_pred::Mpi::Mpi::Mpi_getname (*self*)

Returns

: The name

Definition at line 59 of file Mpi.py.

Referenced by Mpi_getnprocs().

6.25.3.7 def irna::iRNA_pred::Mpi::Mpi::Mpi_getnprocs (*self*)

Returns

: The number of processor

Definition at line 45 of file Mpi.py.

References Mpi_getname(), irna::iRNA_pred::Files::Files::myrank, and myrank.

6.25.3.8 def irna::iRNA_pred::Mpi::Mpi::Mpi_getSoft (*self, soft_list, soft_name*)

Test if that soft has already been used.

Parameters

soft_list,:	List of soft already used
soft_name,:	Soft name

Returns

: soft file name

Definition at line 235 of file Mpi.py.

References Mpi_write_data().

Referenced by Mpi_sup_process(), and Mpi_write_exectime().

6.25.3.9 def irna::iRNA_pred::Mpi::Mpi::Mpi_master (*self, soft_list, comp_list, result_out, matrix, compair*)

Master process.

Parameters

soft_list,:	List of soft
comp_list,:	List of comparison
result_out,:	Result repertory
matrix,:	Matrix file
compair,:	Comparison object

Definition at line 102 of file Mpi.py.

References Mpi_end_processus(), Mpi_exit_processus(), Mpi_sup_process(), Mpi_write_exectime(), and nprocs.

Referenced by Mpi_end_processus(), and Mpi_write_exectime().

6.25.3.10 def irna::iRNA_pred::Mpi::Mpi::Mpi_run (*self, predict, compair*)

Control Mpi procedure.

Parameters

predict,:	List of data for comparison
compair,:	Comparaison object

Definition at line 370 of file Mpi.py.

Referenced by Mpi_exit_processus().

6.25.3.11 def irna::iRNA_pred::Mpi::Mpi::Mpi_slave (*self, result_out, buffer_size, compair*)

Slave process.

Parameters

compair,:	Comparison object

Definition at line 272 of file Mpi.py.

References Mpi_end_processus(), Mpi_exit_processus(), Mpi_write_data(), irna::iRNA_pred::Files::Files::myrank, myrank, and nprocs.

Referenced by Mpi_end_processus(), and Mpi_write_data().

6.25.3.12 def irna::iRNA_pred::Mpi::Mpi::Mpi_sup_process (*self, status, j, max_comparison*)

Termine les processus supplementaire.

Parameters

status,:	
j,:	
max_files,:	

Definition at line 198 of file Mpi.py.

References Mpi_getSoft().

Referenced by Mpi_master().

6.25.3.13 def irna::iRNA_pred::Mpi::Mpi::Mpi_write_data (*self, result_data, result_out, soft_name, ref, thread, part*)

Write xml result file.

Parameters

result_data,:	Interact object
result_out,:	Result repertory
soft_name,:	Software name
ref,:	Number of the ref
part,:	Number of the part

Definition at line 255 of file Mpi.py.

References Mpi_slave().

Referenced by Mpi_getSoft(), and Mpi_slave().

6.25.3.14 def irna::iRNA_pred::Mpi::Mpi::Mpi_write_exectime (*self, exec_time, result_out*)

Write exectime of command.

Parameters

exec_time,:	Tab of execution time for each command
result_out,:	Result repertory

Definition at line 68 of file Mpi.py.

References Mpi_getSoft(), and Mpi_master().

Referenced by Mpi_getmyrank(), and Mpi_master().

6.25.4 Member Data Documentation

6.25.4.1 irna::iRNA_pred::Mpi::Mpi::comm

Definition at line 28 of file Mpi.py.

6.25.4.2 irna::iRNA_pred::Mpi::Mpi::myrank

Definition at line 28 of file Mpi.py.

Referenced by Mpi_end_processus(), Mpi_getnprocs(), and Mpi_slave().

6.25.4.3 irna::iRNA_pred::Mpi::Mpi::name

Definition at line 28 of file Mpi.py.

Referenced by Mpi_getmyrank().

6.25.4.4 irna::iRNA_pred::Mpi::Mpi::nprocs

Definition at line 28 of file Mpi.py.

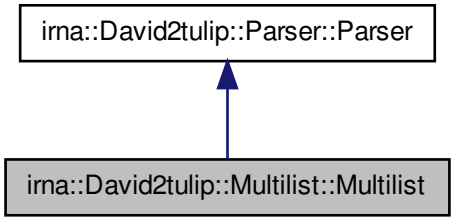
Referenced by irna::iRNA_stat::Mpi::Mpi::getSendCom(), Mpi_getComm(), Mpi_master(), Mpi_slave(), and irna::iRNA_stat::Mpi::Mpi::worker().

The documentation for this class was generated from the following file:

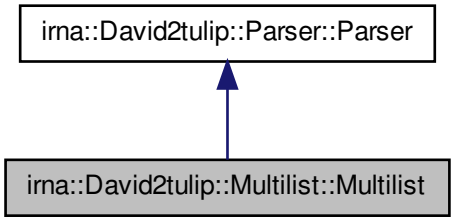
- /home/amine/workspace/iRNA/irna/iRNA_pred/Mpi.py

6.26 irna::David2tulip::Multilist::Multilist Class Reference

Inheritance diagram for irna::David2tulip::Multilist::Multilist:



Collaboration diagram for irna::David2tulip::Multilist::Multilist:



Public Member Functions

- def __init__

  Instanciate multilist object.
- def getnodelists

  Read nodes.
- def getPosTable
- def createedges

  Create edges.
- def setdata

Build the graph.

- def getFilter

  Parse gene known.

- def writefilterlist

  Write the filtered multilist.

- def GOfilter

  Filter mRNA based on GO-known gene.

Public Attributes

- multilist_file
- filtered

6.26.1 Detailed Description

Definition at line 12 of file Multilist.py.

6.26.2 Constructor & Destructor Documentation

6.26.2.1 def irna::David2tulip::Multilist::Multilist::__init__ (*self, multilist_file*)

Instanciate multilist object.

Parameters

multilist_file,:	Multilist file

Definition at line 19 of file Multilist.py.

6.26.3 Member Function Documentation

6.26.3.1 def irna::David2tulip::Multilist::Multilist::createedges (*self, header_nodes, tail_nodes*)

Create edges.

Parameters

header_nodes,:	list of header nodes
tail_nodes,:	list of tail nodes

Returns

: list of edges

Definition at line 100 of file Multilist.py.

References irna::David2tulip::Parser::Parser::createnodes(), irna::David2tulip::Parser::-Parser::getlinknode(), getnodelists(), getPosTable(), multilist_file, and setdata().

Referenced by getPosTable(), and setdata().

6.26.3.2 def irna::David2tulip::Multilist::Multilist::getFilter (*self, filter_file*)

Parse gene known.

Parameters

filter_file,:	GO file

Returns

: List of mRNA known from the GO

Definition at line 155 of file Multilist.py.

References filtered, multilist_file, and writefilterlist().

Referenced by setdata(), and writefilterlist().

6.26.3.3 def irna::David2tulip::Multilist::Multilist::getnodelists (*self*)

Read nodes.

Definition at line 66 of file Multilist.py.

References getPosTable(), and multilist_file.

Referenced by createedges().

6.26.3.4 def irna::David2tulip::Multilist::Multilist::getPosTable (*self, header_nodes, header*)

Parameters

header_-nod,:	

Definition at line 85 of file Multilist.py.

References createedges(), and multilist_file.

Referenced by createedges(), and getnodelists().

6.26.3.5 def irna::David2tulip::Multilist::Multilist::GOfilter (*self, filter_file, results*)

Filter mRNA based on GO-known gene.

Parameters

filter_file,:	GO file
results,:	Path to result repertory

Definition at line 198 of file Multilist.py.

Referenced by writefilterlist().

6.26.3.6 def irna::David2tulip::Multilist::Multilist::setdata (*self, node_objects, edge_objects*)

Build the graph.

Parameters

node_objects,:	list of node objects
edge_objects,:	list of edge objects

Returns

: List of node and edge objects

Definition at line 136 of file Multilist.py.

References createedges(), and getFilter().

Referenced by createedges().

6.26.3.7 def irna::David2tulip::Multilist::Multilist::writefilterlist (*self, go_list, results*)

Write the filtered multilist.

Parameters

go_list,:	List of mRNA known
results,:	Path to result repertory

Definition at line 175 of file Multilist.py.

References filtered, getFilter(), GOfilter(), multilist_file, and writefilterlist().

Referenced by getFilter(), and writefilterlist().

6.26.4 Member Data Documentation

6.26.4.1 irna::David2tulip::Multilist::Multilist::filtered

Definition at line 175 of file Multilist.py.

Referenced by getFilter(), and writefilterlist().

6.26.4.2 irna::David2tulip::Multilist::Multilist::multilist_file

Definition at line 19 of file Multilist.py.

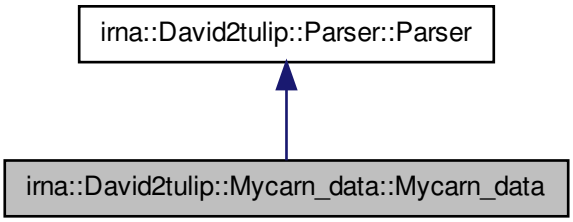
Referenced by createedges(), getFilter(), getnodelists(), getPosTable(), and writefilterlist().

The documentation for this class was generated from the following file:

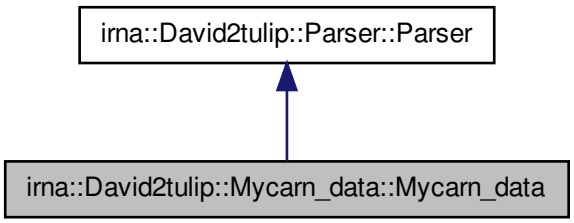
- /home/amine/workspace/iRNA/irna/David2tulip/Multilist.py

6.27 irna::David2tulip::Mycarn_data::Mycarn_data Class Reference

Inheritance diagram for irna::David2tulip::Mycarn_data::Mycarn_data:



Collaboration diagram for irna::David2tulip::Mycarn_data::Mycarn_data:



Public Member Functions

- def __init__

  Instanciate pValue object.
- def setRNAlength

  Set RNA length.
- def setdata

  Add Length information to nodes.

Public Attributes

- dbmanage

6.27.1 Detailed Description

Definition at line 13 of file Mycarn_data.py.

6.27.2 Constructor & Destructor Documentation

6.27.2.1 def irna::David2tulip::Mycarn_data::Mycarn_data::__init__ (*self, mycarn_db, fastmode*)

Instanciate pValue object.

Parameters

pValue_file,:	pValue file

Definition at line 20 of file Mycarn_data.py.

6.27.3 Member Function Documentation

6.27.3.1 def irna::David2tulip::Mycarn_data::Mycarn_data::setdata (*self, node_objects, edge_objects*)

Add Length information to nodes.

Parameters

node_objects,:	List of node objects
edge_objects,:	List of edge objects

Definition at line 43 of file Mycarn_data.py.

References setRNAlength().

Referenced by setRNAlength().

6.27.3.2 def irna::David2tulip::Mycarn_data::Mycarn_data::setRNAlength (*self, type_RNA, node_objects*)

Set RNA length.

Parameters

type_RNA,:	Type of RNA
node_objects,:	List of node object

Definition at line 31 of file Mycarn_data.py.

References setdata().

Referenced by setdata().

6.27.4 Member Data Documentation

6.27.4.1 irna::David2tulip::Mycarn_data::Mycarn_data::dbmanage

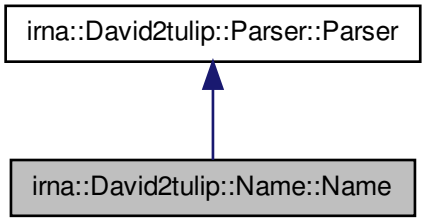
Definition at line 20 of file Mycarn_data.py.

The documentation for this class was generated from the following file:

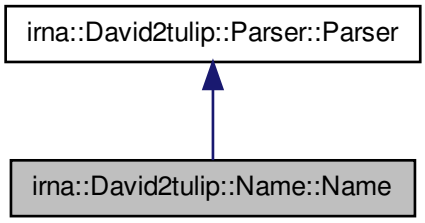
- /home/amine/workspace/iRNA/irna/David2tulip/Mycarn_data.py

6.28 irna::David2tulip::Name::Name Class Reference

Inheritance diagram for irna::David2tulip::Name::Name:



Collaboration diagram for irna::David2tulip::Name::Name:



Public Member Functions

- def __init__

  Instanciate name parser object.
- def setdata

  Add sRNA - sRNA edges based on their similarity.

Public Attributes

- name_file

6.28.1 Detailed Description

Definition at line 11 of file Name.py.

6.28.2 Constructor & Destructor Documentation

6.28.2.1 def irna::David2tulip::Name::Name::__init__ (*self, name_file*)

Instanciate name parser object.

Parameters

name_file,:	Name file

Definition at line 18 of file Name.py.

6.28.3 Member Function Documentation

6.28.3.1 def irna::David2tulip::Name::Name::setdata (*self, node_objects, edge_objects*)

Add sRNA - sRNA edges based on their similarity.

Parameters

node_objects,:	list of node objects
edge_objects,:	list of edge objects

Definition at line 28 of file Name.py.

References irna::David2tulip::Parser::Parser::getlinknode(), and name_file.

6.28.4 Member Data Documentation

6.28.4.1 irna::David2tulip::Name::Name::name_file

Definition at line 18 of file Name.py.

Referenced by setdata().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/David2tulip/Name.py

6.29 irna::David2tulip::Node::Node Class Reference

: Handle RNA information

Public Member Functions

- def __init__

  Instanciate Node object.
- def addgroupelement

  Add a group element.
- def setuniquegroup

  Set unique element in the group.
- def printgroupdata

  Print group data.
- def println

  Print object values.
- def __cmp__

  General method to compare node based on the name.

Public Attributes

- name
- code
- gender
- num
- group
- length

6.29.1 Detailed Description

: Handle RNA information

Author

: Amine Ghozlane

Version

: 1.0

Definition at line 7 of file Node.py.

6.29.2 Constructor & Destructor Documentation

6.29.2.1 def irna::David2tulip::Node::Node::__init__ (*self, name, gender, num*)

Instanciate Node object.

Parameters

name,:	Name of the node
gender,:	Gender of the node
num,:	Num of the node

Definition at line 16 of file Node.py.

6.29.3 Member Function Documentation

6.29.3.1 def irna::David2tulip::Node::Node::__cmp__ (*self, other*)

General method to compare node based on the name.

Parameters

other,:	Compared value

Definition at line 63 of file Node.py.

Referenced by printgroupdata().

6.29.3.2 def irna::David2tulip::Node::Node::addgroupelement (*self, numgroup*)

Add a group element.

Parameters

numgroup,:	Number of a group

Definition at line 31 of file Node.py.

References group, printgroupdata(), and setuniquegroup().

6.29.3.3 def irna::David2tulip::Node::Node::printgroupdata (*self*)

Print group data.

Definition at line 45 of file Node.py.

References __cmp__(), code, gender, length, irna::David2tulip::Files::Files::name, name, num, printgroupdata(), and println().

Referenced by addgroupelement(), and printgroupdata().

6.29.3.4 def irna::David2tulip::Node::Node::println (*self*)

Print object values.

Definition at line 55 of file Node.py.

References irna::David2tulip::Files::Files::name, and name.

Referenced by printgroupdata().

6.29.3.5 def irna::David2tulip::Node::Node::setuniquegroup (*self*)

Set unique element in the group.

Definition at line 38 of file Node.py.

References group, and setuniquegroup().

Referenced by addgroupelement(), and setuniquegroup().

6.29.4 Member Data Documentation

6.29.4.1 irna::David2tulip::Node::Node::code

Definition at line 16 of file Node.py.

Referenced by printgroupdata().

6.29.4.2 irna::David2tulip::Node::Node::gender

Definition at line 16 of file Node.py.

Referenced by printgroupdata().

6.29.4.3 irna::David2tulip::Node::Node::group

Definition at line 16 of file Node.py.

Referenced by addgroupelement(), and setuniquegroup().

6.29.4.4 irna::David2tulip::Node::Node::length

Definition at line 16 of file Node.py.

Referenced by printgroupdata().

6.29.4.5 irna::David2tulip::Node::Node::name

Definition at line 16 of file Node.py.

Referenced by irna::iRNA_pred::Mpi::Mpi::Mpi_getmyrank(), printgroupdata(), and println().

6.29.4.6 irna::David2tulip::Node::Node::num

Definition at line 16 of file Node.py.

Referenced by printgroupdata().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/David2tulip/Node.py

6.30 irna::iRNA_stat::NormScore::NormScore Class Reference

Public Member Functions

- def __init__

  Instanciate NormScore object.
- def defnormfunction

  Determine the function to apply depending on the type of software.
- def normSeveralScore

  Compute normalised score in several score context.
- def normSeveralEnergy

  Compute normalised energy in several energy context.
- def normSeveralContactScore

  Compute normalised energy in several energy context.
- def normUniqueSolution

  Compute normalised score/energy in several contact context.
- def run

  Compute normalized score.

Public Attributes

- normfuncmap
- interactions
- type_sol
- score_type
- dbmanage
- norm_score
- pos

6.30.1 Detailed Description

Definition at line 11 of file NormScore.py.

6.30.2 Constructor & Destructor Documentation

6.30.2.1 def irna::iRNA_stat::NormScore::NormScore::__init__ (*self, data, dbmanage*)

Instanciate NormScore object.

Parameters

data,:	Communication object
dbmanage,:	Access to the database

Definition at line 19 of file NormScore.py.

6.30.3 Member Function Documentation

6.30.3.1 def irna::iRNA_stat::NormScore::NormScore::defnormfunction (*self*)

Determine the function to apply depending on the type of software.

Definition at line 30 of file NormScore.py.

References normfuncmap, normSeveralScore(), irna::iRNA_stat::Interaction::-Interaction::pos, irna::iRNA_stat::Computer::Computer::pos, pos, type_sol, irna::iRNA_stat::Interaction::Interaction::type_sol, and irna::iRNA_stat::Computer::Computer-::type_sol.

Referenced by run().

6.30.3.2 def irna::iRNA_stat::NormScore::NormScore::normSeveralContactScore (*self, score, loglen, score_type, i*)

Compute normalised energy in several energy context.

Parameters

score,:	Score
loglen,:	Log length value
score_type,:	Type of score
i,:	Position in the tab

Definition at line 75 of file NormScore.py.

References irna::iRNA_stat::Computer::Computer::norm_score, norm_score, irna::iRNA_stat::Interaction::Interaction::pos, irna::iRNA_stat::Computer::Computer::pos, pos, and run().

Referenced by normSeveralEnergy().

6.30.3.3 def irna::iRNA_stat::NormScore::NormScore::normSeveralEnergy (*self, score, loglen, score_type, i*)

Compute normalised energy in several energy context.

Parameters

score,:	Score
loglen,:	Log length value
score_type,:	Type of score
i,:	Position in the tab

Definition at line 58 of file NormScore.py.

References irna::iRNA_stat::Computer::Computer::norm_score, norm_score, normSeveralContactScore(), normUniqueSolution(), irna::iRNA_stat::Interaction::Interaction::pos, irna::iRNA_stat::Computer::Computer::pos, and pos.

Referenced by normSeveralScore().

6.30.3.4 def irna::iRNA_stat::NormScore::NormScore::normSeveralScore (*self, score, loglen, score_type, i*)

Compute normalised score in several score context.

Parameters

score,:	Score
loglen,:	Log length value
score_type,:	Type of score
i,:	Position in the tab

Definition at line 44 of file NormScore.py.

References irna::iRNA_stat::Computer::Computer::norm_score, norm_score, normSeveralEnergy(), irna::iRNA_stat::Interaction::Interaction::pos, irna::iRNA_stat::Computer::Computer::pos, and pos.

Referenced by defnormfunction().

6.30.3.5 def irna::iRNA_stat::NormScore::NormScore::normUniqueSolution (*self, score, loglen, score_type, i*)

Compute normalised score/energy in several contact context.

Parameters

score,:	Score
loglen,:	Log length value
score_type,:	Type of score
i,:	Position in the tab

Definition at line 88 of file NormScore.py.

References interactions, irna::iRNA_stat::Interaction::Interaction::interactions, irna::iRNA_stat::Computer::Computer::interactions, irna::iRNA_stat::Computer::Computer::norm_score, norm_score, irna::iRNA_stat::Interaction::Interaction::pos, irna::iRNA_stat::Computer::Computer::pos, and pos.

Referenced by normSeveralEnergy().

6.30.3.6 def irna::iRNA_stat::NormScore::NormScore::run (*self*)

Compute normalized score.

Definition at line 97 of file NormScore.py.

References defnormfunction(), interactions, irna::iRNA_stat::Interaction::Interaction::interactions, irna::iRNA_stat::Computer::Computer::interactions, irna::iRNA_stat::Computer::Computer::norm_score, norm_score, irna::iRNA_stat::Interaction::Interaction::pos, irna::iRNA_stat::Computer::Computer::pos, pos, score_type, and irna::iRNA_stat::Computer::Computer::score_type.

Referenced by normSeveralContactScore().

6.30.4 Member Data Documentation

6.30.4.1 irna::iRNA_stat::NormScore::NormScore::dbmanage

Definition at line 19 of file NormScore.py.

6.30.4.2 irna::iRNA_stat::NormScore::NormScore::interactions

Definition at line 19 of file NormScore.py.

Referenced by normUniqueSolution(), irna::iRNA_stat::pValue::pValue::run(), and run().

6.30.4.3 irna::iRNA_stat::NormScore::NormScore::norm_score

Definition at line 97 of file NormScore.py.

Referenced by irna::iRNA_stat::Regression::Regression::ecdf_estimate(), irna::iRNA_stat::Regression::Regression::linear_regression(), normSeveralContactScore(), normSeveralEnergy(), normSeveralScore(), normUniqueSolution(), irna::iRNA_stat::pValue::pValue::run(), and run().

6.30.4.4 irna::iRNA_stat::NormScore::NormScore::normfuncmap

Definition at line 19 of file NormScore.py.

Referenced by defnormfunction().

6.30.4.5 irna::iRNA_stat::NormScore::NormScore::pos

Definition at line 97 of file NormScore.py.

Referenced by defnormfunction(), normSeveralContactScore(), normSeveralEnergy(), normSeveralScore(), normUniqueSolution(), and run().

6.30.4.6 irna::iRNA_stat::NormScore::NormScore::score_type

Definition at line 19 of file NormScore.py.

Referenced by run().

6.30.4.7 irna::iRNA_stat::NormScore::NormScore::type_sol

Definition at line 19 of file NormScore.py.

Referenced by defnormfunction().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/NormScore.py

6.31 irna::iRNA_pred::Parse::Parse Class Reference

: Parse data from the different software.

Public Member Functions

- def parseGuugle

  Parse Guugle result.
- def parseIntaRNA

  Parse IntaRNA result.
- def parseRNAup

  Parse RNAup result.
- def parseRNAplex

  Parse RNAplex and RNAduplex result.
- def parseRNAduplex

  Parse RNAplex and RNAduplex result.
- def getposition_RNAcofold0

  Get the position of interaction for RNAcofold.
- def getposition_RNAcofold1

  Get the position of interaction for RNAcofold.
- def reverseElongate

  Get a double reverse for a tab of tab.

- def forwardTable

  Reverse a table.
- def parseRNAcofold

  Parse RNAcofold result.
- def getResultSequence_RNAhybrid

  Get contact sequence.
- def parseRNAhybrid

  Parse RNAhybrid result.
- def getPositions_rip

  Get the positions for rip problem output.
- def elongatePositions_rip

  Elongate the contact position.
- def getSequences_53

  Get the sequence in contact in 5'3' sense.
- def getSequences_local_reversed

  Get the sequence in contact in 5'3' sense.
- def consensus

  Find the contact position between sRNA and mRNA.
- def reverseSequence

  Reverse a sequence.
- def reverseTablemax

  Reverse a table.
- def reverseMinTable

  Reverse a table into 5'3'.
- def parseRactip

  Parse Ractip result.
- def readCompfile

  Read the comp_list file.
- def comparaison

  Determine if comparison is needed.
- def parseBlastall

  Parse Blastall result.
- def parseBistaRNA

  Parse BistaRNA result.
- def parseYass

  Parse Yass output.
- def parseSsearch

  Parse ssearch output.
- def parsePairfold

  Parse Pairfold result.
- def runParsing

  Run the parsing.

6.31.1 Detailed Description

: Parse data from the different software.

Definition at line 14 of file Parse.py.

6.31.2 Member Function Documentation

6.31.2.1 def irna::iRNA_pred::Parse::Parse::comparaison (*self, mRNA, sRNA, comp_data*)

Determine if comparison is needed.

Parameters

mRNA,:	mRNA name
sRNA,:	sRNA name
comp_data,:	Comparison data

Returns

: True if comparison is expected, False otherwise

Definition at line 705 of file Parse.py.

References comparaison().

Referenced by comparaison(), parseRactip(), and parseYass().

6.31.2.2 def irna::iRNA_pred::Parse::Parse::consensus (*self, resultsRNA, resultmRNA, tab_sRNA, tab_mRNA, debutsRNA, debutmRNA, i, j*)

Find the contact position between sRNA and mRNA.

Parameters

resultsRNA,:	New table of contact for sRNA
resultmRNA,:	New table of contact for mRNA
tab_sRNA,:	Old table of contact for sRNA
tab_mRNA,:	Old table of contact for mRNA
debutsRNA,:	sRNA begin
debutmRNA,:	mRNA begin
i,:	Position in the old table of sRNA
j,:	Position in the old table of mRNA

Definition at line 511 of file Parse.py.

References consensus(), reverseMinTable(), reverseSequence(), and reverseTablemax().

Referenced by consensus(), getSequences_53(), parseBistaRNA(), parseRactip(), parseRNAcofold(), parseRNAhybrid(), and parseSsearch().

6.31.2.3 def irna::iRNA_pred::Parse::Parse::elongatePositions_rip (*self, tab*)

Elongate the contact position.

Parameters

tab,:	Table of contact position

Returns

: Table elongate

Definition at line 452 of file Parse.py.

References getSequences_53(), and getSequences_local_reversed().

Referenced by parseBistaRNA(), parseRactip(), parseRNAcofold(), parseRNAhybrid(), and parseSsearch().

6.31.2.4 def irna::iRNA_pred::Parse::Parse::forwardTable (*self, tab_RNA*)

Reverse a table.

Parameters

tab_RNA,:	Table of RNA

Returns

: Reversed table

Definition at line 269 of file Parse.py.

Referenced by getposition_RNAcofold1(), parseRNAcofold(), and parseSsearch().

6.31.2.5 def irna::iRNA_pred::Parse::Parse::getposition_RNAcofold0 (*self, result*)

Get the position of interaction for RNAcofold.

Parameters

result,:	sRNA result

Returns

: tabmRNA, tabsRNA

Definition at line 219 of file Parse.py.

References getposition_RNAcofold1().

Referenced by parseRNAcofold(), parseRNAduplex(), and parseSsearch().

6.31.2.6 def irna::iRNA_pred::Parse::Parse::getposition_RNAcofold1 (*self, result*)

Get the position of interaction for RNAcofold.

Parameters

result,:	mRNA result

Returns

: tabmRNA, tabsRNA

Definition at line 235 of file Parse.py.

References forwardTable(), and reverseElongate().

Referenced by getposition_RNAcofold0(), parseRNAcofold(), and parseSsearch().

6.31.2.7 def irna::iRNA_pred::Parse::Parse::getPositions_rip (*self, RNA_r, seq*)

Get the positions for rip problem output.

Parameters

RNA_r,:	RNA result output

Returns

: Position of contact for RNA

Definition at line 438 of file Parse.py.

Referenced by parseBistaRNA(), parseRactip(), and parseRNAhybrid().

6.31.2.8 def irna::iRNA_pred::Parse::Parse::getResultSequence_RNAhybrid (*self, out_RNA, in_RNA, RNA_begin, length_RNA, int_char*)

Get contact sequence.

Parameters

out_RNA,:	Non contact nucleotid
in_RNA,:	Contact nucleotid
RNA_begin,:	Begining position of the RNA
length_RNA,:	Length of the RNA sequence
int_char,:	Interaction caracter

Definition at line 339 of file Parse.py.

References parseRNAhybrid().

Referenced by parseRNAcofold(), and parseRNAhybrid().

6.31.2.9 def irna::iRNA_pred::Parse::Parse::getSequences_53 (*self, RNA, tab_RNA*)

Get the sequence in contact in 5'3' sense.

Parameters

RNA,:	RNA sequence
tab_RNA,:	Position of contact for RNA

Returns

: RNA tab of contact sequences

Definition at line 477 of file Parse.py.

References consensus(), and reverseSequence().

Referenced by elongatePositions_rip(), parseBistaRNA(), and parseRactip().

6.31.2.10 def irna::iRNA_pred::Parse::Parse::getSequences_local_reversed (*self, RNA*)

Get the sequence in contact in 5'3' sense.

Parameters

RNA,:	RNA sequence

Returns

: RNA tab of contact sequences

Definition at line 491 of file Parse.py.

Referenced by elongatePositions_rip().

6.31.2.11 def irna::iRNA_pred::Parse::Parse::parseBistaRNA (*self, data, matrix, root*)

Parse BistaRNA result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node

Definition at line 766 of file Parse.py.

References consensus(), elongatePositions_rip(), getPositions_rip(), getSequences_-53(), parseSsearch(), and parseYass().

Referenced by parseBlastall(), and runParsing().

6.31.2.12 def irna::iRNA_pred::Parse::Parse::parseBlastall (*self, data, matrix, root, complist_file*)

Parse Blastall result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node
complist_-file,:	Comparison list file

Definition at line 721 of file Parse.py.

References parseBistaRNA().

Referenced by readCompfile(), and runParsing().

6.31.2.13 def irna::iRNA_pred::Parse::Parse::parseGuugle (*self, data, matrix, root*)

Parse Guugle result.

Parameters

data,:	result
matrix,:	score matrix
root,:	xml root node

Definition at line 22 of file Parse.py.

References parseIntaRNA().

Referenced by parsePairfold().

6.31.2.14 def irna::iRNA_pred::Parse::Parse::parseIntaRNA (*self, data, matrix, root*)

Parse IntaRNA result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node

Definition at line 109 of file Parse.py.

References parseRNAup().

Referenced by parseGuugle(), and parsePairfold().

6.31.2.15 def irna::iRNA_pred::Parse::Parse::parsePairfold (*self, data, matrix, root*)

Parse Pairfold result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node

Definition at line 892 of file Parse.py.

References parseGuugle(), parseIntaRNA(), parseRNAcofold(), parseRNAduplex(), parseRNAplex(), parseRNAup(), reverseTablemax(), and runParsing().

Referenced by parseSsearch(), and runParsing().

6.31.2.16 def irna::iRNA_pred::Parse::Parse::parseRactip (*self, data, matrix, root*)

Parse Ractip result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node

Definition at line 619 of file Parse.py.

References comparaison(), consensus(), elongatePositions_rip(), getPositions_rip(), getSequences_53(), readCompfile(), reverseSequence(), and reverseTablemax().

Referenced by reverseSequence(), and runParsing().

6.31.2.17 def irna::iRNA_pred::Parse::Parse::parseRNAcofold (*self, data, matrix, root*)

Parse RNAcofold result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node

Definition at line 283 of file Parse.py.

References consensus(), elongatePositions_rip(), forwardTable(), getposition_RNAcofold0(), getposition_RNAcofold1(), getResultSequence_RNAhybrid(), reverseElongate(), and reverseTablemax().

Referenced by parsePairfold(), and reverseElongate().

6.31.2.18 def irna::iRNA_pred::Parse::Parse::parseRNAduplex (*self, data, matrix, root*)

Parse RNAplex and RNAduplex result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node

Definition at line 200 of file Parse.py.

References getposition_RNAcofold0().

Referenced by parsePairfold(), and parseRNAplex().

6.31.2.19 def irna::iRNA_pred::Parse::Parse::parseRNAhybrid (*self, data, matrix, root*)

Parse RNAhybrid result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node

Definition at line 365 of file Parse.py.

References consensus(), elongatePositions_rip(), getPositions_rip(), getResultSequence_RNAhybrid(), and reverseTablemax().

Referenced by getResultSequence_RNAhybrid(), and runParsing().

6.31.2.20 def irna::iRNA_pred::Parse::Parse::parseRNAplex (*self, data, matrix, root*)

Parse RNAplex and RNAduplex result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node

Definition at line 180 of file Parse.py.

References parseRNAduplex().

Referenced by parsePairfold(), and parseRNAup().

6.31.2.21 def irna::iRNA_pred::Parse::Parse::parseRNAup (*self, data, matrix, root*)

Parse RNAup result.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node

Definition at line 152 of file Parse.py.

References parseRNAplex().

Referenced by parseIntaRNA(), and parsePairfold().

6.31.2.22 def irna::iRNA_pred::Parse::Parse::parseSsearch (*self, data, sRNA, matrix, root, complist_file*)

Parse ssearch output.

Parameters

data,:	Soft result
sRNA,:	sRNA name
matrix,:	score matrix
root,:	xml root node
complist_file,:	Comparison list file

Definition at line 851 of file Parse.py.

References consensus(), elongatePositions_rip(), forwardTable(), getposition_RNAcofold0(), getposition_RNAcofold1(), parsePairfold(), and reverseElongate().

Referenced by parseBistaRNA(), and runParsing().

6.31.2.23 def irna::iRNA_pred::Parse::Parse::parseYass (*self, data, matrix, root, complist_file*)

Parse Yass output.

Parameters

data,:	Soft result
matrix,:	score matrix
root,:	xml root node
complist_file,:	Comparison list file

Definition at line 826 of file Parse.py.

References comparaison(), and readCompfile().

Referenced by parseBistaRNA(), and runParsing().

6.31.2.24 def irna::iRNA_pred::Parse::Parse::readCompfile (*self, complist_file*)

Read the comp_list file.

Parameters

complist_file,:	Comparison list file

Returns

: Comparison data

Definition at line 678 of file Parse.py.

References parseBlastall(), and readCompfile().

Referenced by parseRactip(), parseYass(), and readCompfile().

6.31.2.25 def irna::iRNA_pred::Parse::Parse::reverseElongate (*self, tab*)

Get a double reverse for a tab of tab.

Parameters

tab,:	Table of table

Returns

: Reversed table of table

Definition at line 255 of file Parse.py.

References parseRNAcofold().

Referenced by getposition_RNAcofold1(), parseRNAcofold(), and parseSsearch().

6.31.2.26 def irna::iRNA_pred::Parse::Parse::reverseMinTable (*self, tab_RNA*)

Reverse a table into 5'3'.

Parameters

tab_RNA,:	Table of RNA

Returns

: Reversed table

Definition at line 605 of file Parse.py.

Referenced by consensus().

6.31.2.27 def irna::iRNA_pred::Parse::Parse::reverseSequence (*self, seq*)

Reverse a sequence.

Parameters

seq,:	Sequence of text

Returns

: Reversed sequence

Definition at line 582 of file Parse.py.

References parseRactip().

Referenced by consensus(), getSequences_53(), and parseRactip().

6.31.2.28 def irna::iRNA_pred::Parse::Parse::reverseTablemax (*self, tab_RNA, maxValue*)

Reverse a table.

Parameters

tab_RNA,:	Table of RNA

Returns

: Reversed table

Definition at line 593 of file Parse.py.

Referenced by consensus(), parsePairfold(), parseRactip(), parseRNAcofold(), and parseRNAhybrid().

6.31.2.29 def irna::iRNA_pred::Parse::Parse::runParsing (*self, soft_name, matrix, complist_file, sRNA, mRNA, data, root*)

Run the parsing.

Parameters

cmd,:	Soft command
complist_file,:	Comparison list file
data,:	Soft result

Definition at line 935 of file Parse.py.

References parseBistaRNA(), parseBlastall(), parsePairfold(), parseRactip(), parseRNAhybrid(), parseSsearch(), and parseYass().

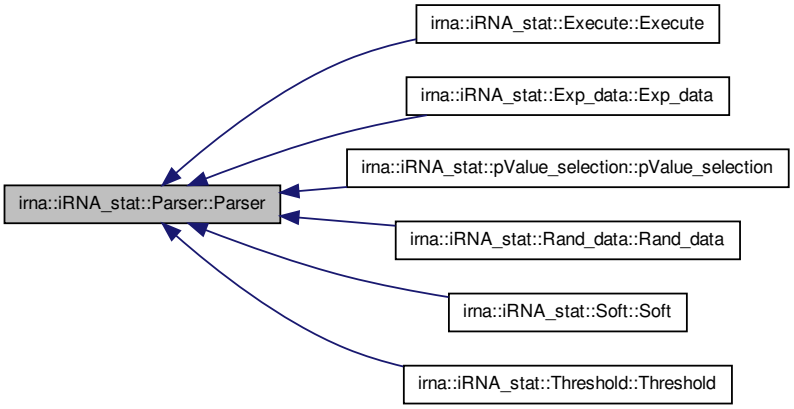
Referenced by parsePairfold().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_pred/Parse.py

6.32 irna::iRNA_stat::Parser::Parser Class Reference

Inheritance diagram for irna::iRNA_stat::Parser::Parser:



Public Member Functions

- def __init__

  Instanciate Parser object.
- def sortdict

  Sort the dictionnary.
- def getData

  Search name in input list.
- def getUnique

  Get unique data.

6.32.1 Detailed Description

Definition at line 10 of file Parser.py.

6.32.2 Constructor & Destructor Documentation

6.32.2.1 def irna::iRNA_stat::Parser::Parser::__init__ (*self*)

Instanciate Parser object.

Definition at line 16 of file Parser.py.

6.32.3 Member Function Documentation

6.32.3.1 def irna::iRNA_stat::Parser::Parser::getData (*self, input_list, name*)

Search name in input list.

Parameters

input_list,:	List
name,:	Search criteria

Definition at line 34 of file Parser.py.

References getUnique().

Referenced by irna::iRNA_stat::Rand_data::Rand_data::getallSofts(), and sortdict().

6.32.3.2 def irna::iRNA_stat::Parser::Parser::getUnique (*self, data_list*)

Get unique data.

Parameters

data_list,:	list of data

Definition at line 46 of file Parser.py.

Referenced by irna::iRNA_stat::pValue_selection::pValue_selection::compute_Davidmatrix(), and getData().

6.32.3.3 def irna::iRNA_stat::Parser::Parser::sortdict (*self, dictionnary, criteria*)

Sort the dictionnary.

Parameters

dictionnary,:	Dictionnary list
criteria,:	Sort criteria

Definition at line 25 of file Parser.py.

References getData().

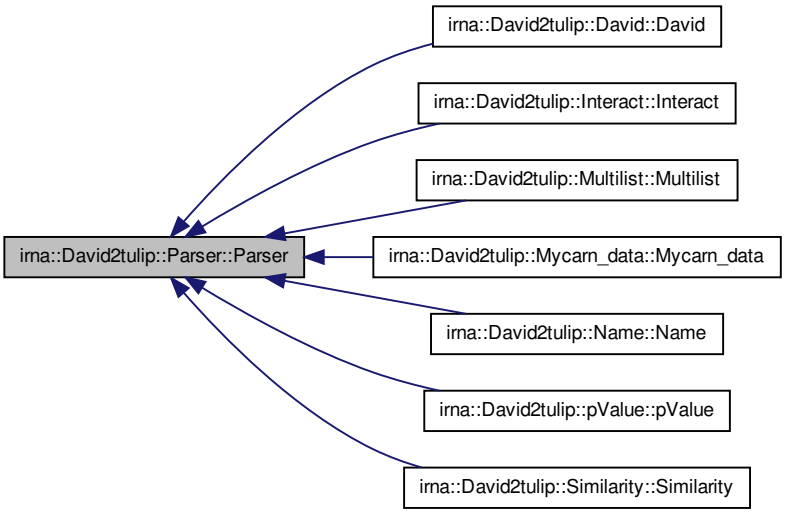
Referenced by irna::iRNA_stat::pValue_selection::pValue_selection::compute_Davidmatrix(), and irna::iRNA_stat::pValue_selection::pValue_selection::compute_similarity().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Parser.py

6.33 irna::David2tulip::Parser::Parser Class Reference

Inheritance diagram for irna::David2tulip::Parser::Parser:



Public Member Functions

- def __init__

  Instanciate Parser object.
- def createnodes

  Create the list of nodes.
- def addelements

  Add an element in list of objects.
- def getlinknode

  Get a node based on its name.
- def getlinkedge
- def getsRNA

  Get list of sRNA.
- def getTarget

  Get targets of one sRNA if category.
- def loadObject

  Load object.
- def printObject

  Write object.

6.33.1 Detailed Description

Definition at line 11 of file Parser.py.

6.33.2 Constructor & Destructor Documentation

6.33.2.1 def irna::David2tulip::Parser::Parser::__init__ (*self*)

Instanciate Parser object.

Definition at line 17 of file Parser.py.

6.33.3 Member Function Documentation

6.33.3.1 def irna::David2tulip::Parser::Parser::addelements (*self, list_objects, element*)

Add an element in list of objects.

Parameters

list_objects,:	list of objects
element,:	object

Definition at line 44 of file Parser.py.

References getlinknode().

Referenced by createnodes(), and irna::David2tulip::Similarity::Similarity::setdata().

6.33.3.2 def irna::David2tulip::Parser::Parser::createnodes (*self, list_element, gender, number*)

Create the list of nodes.

Parameters

list_element,:	
gender,:	Gender of the list

Returns

: list of nodes

Definition at line 27 of file Parser.py.

References addelements().

Referenced by irna::David2tulip::Multilist::Multilist::createedges().

6.33.3.3 def irna::David2tulip::Parser::Parser::getlinkedge (*self, edge_objects, sRNA, mRNA*)

Parameters

edge_objects,:	List of edge objects
sRNA,:	sRNA
mRNA,:	mRNA

Definition at line 68 of file Parser.py.

References getsRNA(), and getTarget().

Referenced by getlinknode(), irna::David2tulip::Interact::Interact::setdata(), irna::David2tulip::pValue::pValue::setdata(), and irna::David2tulip::David::David::writefile().

6.33.3.4 def irna::David2tulip::Parser::Parser::getlinknode (*self, node_objects, name*)

Get a node based on its name.

Parameters

node_objects,:	List of node objects
name,:	Name of searched object

Returns

: node

Definition at line 55 of file Parser.py.

References getlinkedge().

Referenced by addelements(), irna::David2tulip::Multilist::Multilist::createedges(), irna::David2tulip::Similarity::Similarity::setdata(), and irna::David2tulip::Name::Name::setdata().

6.33.3.5 def irna::David2tulip::Parser::Parser::getsRNA (*self, node_objects*)

Get list of sRNA.

Parameters

node_objects,:	List of node objects

Returns

: List of sRNA

Definition at line 82 of file Parser.py.

References loadObject().

Referenced by irna::David2tulip::David::David::analysis(), and getlinkedge().

6.33.3.6 def irna::David2tulip::Parser::Parser::getTarget (*self, sRNA, edge_objects*)

Get targets of one sRNA if category.

Parameters

sRNA,:	sRNA name
edge_objects,:	List of edge objects

Definition at line 91 of file Parser.py.

Referenced by irna::David2tulip::David::David::analysis(), and getlinkedge().

6.33.3.7 def irna::David2tulip::Parser::Parser::loadObject (*self, pickledump*)

Load object.

Parameters

pickledump,:	Filename

Returns

: Object loaded

Definition at line 100 of file Parser.py.

References printObject().

Referenced by getsRNA().

6.33.3.8 def irna::David2tulip::Parser::Parser::printObject (*self, obj, pickledump*)

Write object.

Parameters

obj,:	Object to dump
pickledump,:	Filename

Definition at line 117 of file Parser.py.

Referenced by loadObject(), and irna::David2tulip::David::David::parseChart().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/David2tulip/Parser.py

6.34 irna::iRNA_stat::Pickling::Pickling Class Reference

Public Member Functions

- def __init__

  Instanciate Pickling object.
- def loadobj

  Load the pickling object of the software result.
- def saveobj

  Pickle the object.

Public Attributes

- path

6.34.1 Detailed Description

Definition at line 10 of file Pickling.py.

6.34.2 Constructor & Destructor Documentation

6.34.2.1 def irna::iRNA_stat::Pickling::Pickling::__init__ (*self, path*)

Instanciate Pickling object.

Parameters

path,:	Path of pickling object

Definition at line 17 of file Pickling.py.

6.34.3 Member Function Documentation

6.34.3.1 def irna::iRNA_stat::Pickling::Pickling::loadobj (*self, name, num*)

Load the pickling object of the software result.

Parameters

name,:	Name of the software
num,:	Software id

Definition at line 26 of file Pickling.py.

References path, and saveobj().

6.34.3.2 def irna::iRNA_stat::Pickling::Pickling::saveobj (*self, obj, name, num*)

Pickle the object.

Parameters

obj,:	Computed object
name,:	Name of the software
num,:	Software id

Definition at line 46 of file Pickling.py.

Referenced by loadobj().

6.34.4 Member Data Documentation

6.34.4.1 irna::iRNA_stat::Pickling::Pickling::path

Definition at line 17 of file Pickling.py.

Referenced by loadobj().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Pickling.py

6.35 irna::iRNA_stat::pValue::pValue Class Reference

Public Member Functions

- def __init__

  Instanciate pValue object.
- def run

  Compute pValue.

Public Attributes

- dbmanage

- rand_inf
- softname
- norm_score
- interactions

6.35.1 Detailed Description

Definition at line 10 of file pValue.py.

6.35.2 Constructor & Destructor Documentation

6.35.2.1 def irna::iRNA_stat::pValue::pValue::__init__ (*self, data, dbmanage, rand_inf*)

Instanciate pValue object.

Parameters

data,:	Data object
dbmanage,:	Access to the database
rand_inf,:	Rand_data object

Definition at line 19 of file pValue.py.

6.35.3 Member Function Documentation

6.35.3.1 def irna::iRNA_stat::pValue::pValue::run (*self*)

Compute pValue.

Definition at line 30 of file pValue.py.

References irna::iRNA_stat::NormScore::NormScore::interactions, interactions, irna::iRNA_stat::Interaction::Interaction::interactions, irna::iRNA_stat::Computer::Computer::interactions, norm_score, irna::iRNA_stat::Computer::Computer::norm_score, irna::iRNA_stat::NormScore::NormScore::norm_score, irna::iRNA_stat::Files::Files::rand_inf, rand_inf, and softname.

6.35.4 Member Data Documentation

6.35.4.1 irna::iRNA_stat::pValue::pValue::dbmanage

Definition at line 19 of file pValue.py.

6.35.4.2 irna::iRNA_stat::pValue::pValue::interactions

Definition at line 19 of file pValue.py.

Referenced by run().

6.35.4.3 irna::iRNA_stat::pValue::pValue::norm_score

Definition at line 19 of file pValue.py.

Referenced by irna::iRNA_stat::Regression::Regression::ecdf_estimate(), irna::iRNA_stat::Regression::Regression::linear_regression(), and run().

6.35.4.4 irna::iRNA_stat::pValue::pValue::rand_inf

Definition at line 19 of file pValue.py.

Referenced by run().

6.35.4.5 irna::iRNA_stat::pValue::pValue::softname

Definition at line 19 of file pValue.py.

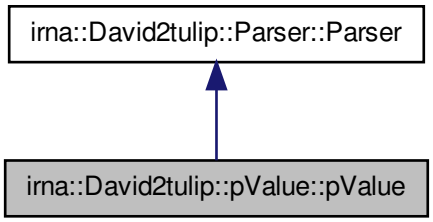
Referenced by run().

The documentation for this class was generated from the following file:

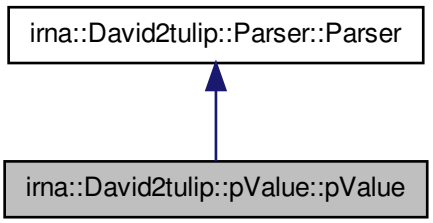
- /home/amine/workspace/iRNA/irna/iRNA_stat/pValue.py

6.36 irna::David2tulip::pValue::pValue Class Reference

Inheritance diagram for irna::David2tulip::pValue::pValue:



Collaboration diagram for irna::David2tulip::pValue::pValue:



Public Member Functions

- def __init__

  Instanciate pValue object.
- def setdata

  Add pValue information to edges.

Public Attributes

- pValue_file

6.36.1 Detailed Description

Definition at line 11 of file pValue.py.

6.36.2 Constructor & Destructor Documentation

6.36.2.1 def irna::David2tulip::pValue::pValue::__init__ (*self, pValue_file*)

Instanciate pValue object.

Parameters

pValue_file,:	pValue file

Definition at line 18 of file pValue.py.

6.36.3 Member Function Documentation

6.36.3.1 def irna::David2tulip::pValue::pValue::setdata (*self, node_objects, edge_objects*)

Add pValue information to edges.

Parameters

node_objects,:	List of node objects
edge_objects,:	List of edge objects

Definition at line 28 of file pValue.py.

References irna::David2tulip::Parser::Parser::getlinkedge(), and pValue_file.

6.36.4 Member Data Documentation

6.36.4.1 irna::David2tulip::pValue::pValue::pValue_file

Definition at line 18 of file pValue.py.

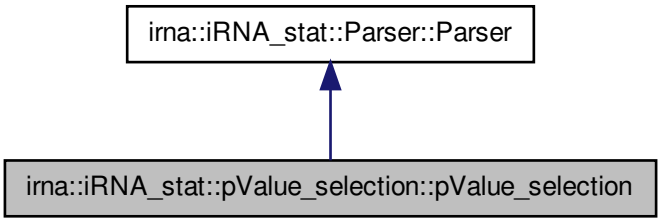
Referenced by setdata().

The documentation for this class was generated from the following file:

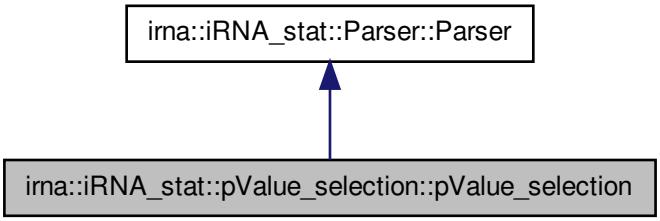
- /home/amine/workspace/iRNA/irna/David2tulip/pValue.py

6.37 irna::iRNA_stat::pValue_selection::pValue_selection Class Reference

Inheritance diagram for irna::iRNA_stat::pValue_selection::pValue_selection:



Collaboration diagram for irna::iRNA_stat::pValue_selection::pValue_selection:



Public Member Functions

- def __init__

  Instanciate pValue_selection object.
- def getnumsRNA

  Get an sRNA in the list.
- def compute_Davidmatrix

  Compute multilist target.
- def compute_frequency

  Compute frequency of mRNA.
- def getCommune

  Count Commune elements between lists.
- def compute_similarity

  Compute similarity between target list of each sRNA.
- def run

  Select targets depending on score and compute frequency and similarity between target groups.

Public Attributes

- pValue_thres

6.37.1 Detailed Description

Definition at line 10 of file pValue_selection.py.

6.37.2 Constructor & Destructor Documentation

6.37.2.1 def irna::iRNA_stat::pValue_selection::pValue_selection::__init__ (*self, pValue_thres*)

Instanciate pValue_selection object.

Parameters

pValue_thres,:	pValue_thres object

Definition at line 17 of file pValue_selection.py.

6.37.3 Member Function Documentation

6.37.3.1 def irna::iRNA_stat::pValue_selection::pValue_selection::compute_Davidmatrix (*self, computer, dbmanage, name, softid*)

Compute multilist target.

Parameters

computer,:	Computer object
dbmanage,:	Access to the database
name,:	Software name
softid,:	Software id

Definition at line 41 of file pValue_selection.py.

References compute_frequency(), getnumsRNA(), irna::iRNA_stat::Parser::Parser::getUnique(), irna::iRNA_pred::Comparison::Comparaison::getUnique(), and irna::iRNA_stat::Parser::Parser::sortdict().

Referenced by compute_similarity(), and getnumsRNA().

6.37.3.2 def irna::iRNA_stat::pValue_selection::pValue_selection::compute_frequency (*self, computer, tabmRNA, unique_tabmRNA*)

Compute frequency of mRNA.

Parameters

computer,:	Computer object
tabmRNA,:	Redondant list of mRNA
unique_tabmRNA,:	Unique mRNA

Definition at line 83 of file pValue_selection.py.

References getCommune().

Referenced by compute_Davidmatrix(), and compute_similarity().

6.37.3.3 def irna::iRNA_stat::pValue_selection::pValue_selection::compute_similarity (*self, computer, matrix_sRNA*)

Compute similarity between target list of each sRNA.

Parameters

computer,:	Computer object
matrix_sRNA,:	List of sRNA targets

Definition at line 107 of file pValue_selection.py.

References compute_Davidmatrix(), compute_frequency(), compute_similarity(), run(), and irna::iRNA_stat::Parser::Parser::sortdict().

Referenced by compute_similarity(), and getCommune().

6.37.3.4 def irna::iRNA_stat::pValue_selection::pValue_selection::getCommune (*self, list1, list2*)

Count Commune elements between lists.

Parameters

list1,:	First list
list2,:	Second list

Returns

: Count the number of elements

Definition at line 95 of file pValue_selection.py.

References compute_similarity(), and getCommune().

Referenced by compute_frequency(), and getCommune().

6.37.3.5 def irna::iRNA_stat::pValue_selection::pValue_selection::getnumsRNA (*self, allsRNA, sRNA*)

Get an sRNA in the list.

Parameters

allsRNA,:	List of sRNAs
sRNA,:	An sRNA

Definition at line 26 of file pValue_selection.py.

References compute_Davidmatrix(), and pValue_thres.

Referenced by compute_Davidmatrix().

6.37.3.6 def irna::iRNA_stat::pValue_selection::pValue_selection::run (*self, computer, dbmanage, name, softid*)

Select targets depending on score and compute frequency and similarity between target groups.

Parameters

computer,:	Computer object
dbmanage,:	Access to the database
name,:	Software name
softid,:	Software id

Definition at line 128 of file pValue_selection.py.

Referenced by compute_similarity().

6.37.4 Member Data Documentation

6.37.4.1 irna::iRNA_stat::pValue_selection::pValue_selection::pValue_thres

Definition at line 17 of file pValue_selection.py.

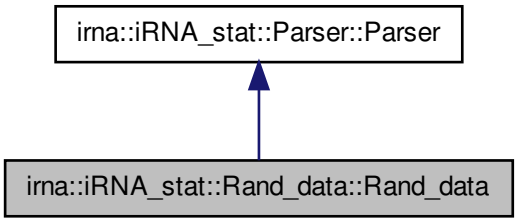
Referenced by getnumsRNA().

The documentation for this class was generated from the following file:

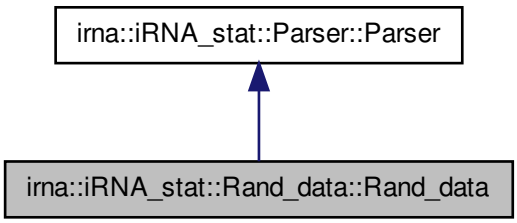
- /home/amine/workspace/iRNA/irna/iRNA_stat/pValue_selection.py

6.38 irna::iRNA_stat::Rand_data::Rand_data Class Reference

Inheritance diagram for irna::iRNA_stat::Rand_data::Rand_data:



Collaboration diagram for irna::iRNA_stat::Rand_data::Rand_data:



Public Member Functions

- def __init__

  Instanciate rand_data object.
- def getRandinf

  Load soft parameters.
- def getallSofts

  Get soft corresponding to one name.
- def getRandRna

  Get analysis of one sRNA by one soft.

Public Attributes

- combined
- soft
- sRNA
- intercept
- slope
- unique_soft

6.38.1 Detailed Description

Definition at line 10 of file Rand_data.py.

6.38.2 Constructor & Destructor Documentation

6.38.2.1 def irna::iRNA_stat::Rand_data::Rand_data::__init__ (*self, rand_file*)

Instanciate rand_data object.

Definition at line 16 of file Rand_data.py.

References getRandinf().

6.38.3 Member Function Documentation

6.38.3.1 def irna::iRNA_stat::Rand_data::Rand_data::getallSofts (*self, soft*)

Get soft corresponding to one name.

Parameters

soft,:	Soft name

Definition at line 52 of file Rand_data.py.

References combined, irna::iRNA_stat::Exp_data::Exp_data::combined, irna::iRNA_stat::Parser::Parser::getData(), irna::iRNA_pred::Merger::Merger::getData(), and getRandRna().

6.38.3.2 def irna::iRNA_stat::Rand_data::Rand_data::getRandinf (*self, rand_file*)

Load soft parameters.

Parameters

rand_file,:	Random file

Definition at line 25 of file Rand_data.py.

Referenced by __init__().

6.38.3.3 def irna::iRNA_stat::Rand_data::Rand_data::getRandRna (*self, soft, sRNA*)

Get analysis of one sRNA by one soft.

Parameters

soft,:	software name
sRNA,:	sRNA name

Definition at line 66 of file Rand_data.py.

Referenced by getallSofts().

6.38.4 Member Data Documentation

6.38.4.1 irna::iRNA_stat::Rand_data::Rand_data::combined

Definition at line 25 of file Rand_data.py.

Referenced by getallSofts().

6.38.4.2 irna::iRNA_stat::Rand_data::Rand_data::intercept

Definition at line 25 of file Rand_data.py.

6.38.4.3 irna::iRNA_stat::Rand_data::Rand_data::slope

Definition at line 25 of file Rand_data.py.

6.38.4.4 irna::iRNA_stat::Rand_data::Rand_data::soft

Definition at line 25 of file Rand_data.py.

Referenced by irna::iRNA_stat::Threshold::Threshold::getSoftnum().

6.38.4.5 irna::iRNA_stat::Rand_data::Rand_data::sRNA

Definition at line 25 of file Rand_data.py.

6.38.4.6 irna::iRNA_stat::Rand_data::Rand_data::unique_soft

Definition at line 25 of file Rand_data.py.

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Rand_data.py

6.39 irna::iRNA_pred::RanRNA::RanRNA Class Reference

Public Member Functions

- def __init__
- def GetValues

  Get double random values.
- def GetIntValues

  Get integer random values.
- def SetLetters

  Set the nucleotide.
- def GenerateSeq

  Generate a random sequence.
- def WriteFasta

  Write the fasta.
- def GenerateFile

  Generate a multifasta with random sequences.

Public Attributes

- GC
- SeqLength
- NbSeq
- OutRep

6.39.1 Detailed Description

Definition at line 12 of file RanRNA.py.

6.39.2 Constructor & Destructor Documentation

6.39.2.1 def irna::iRNA_pred::RanRNA::RanRNA::__init__ (*self, GC, SeqLength, NbSeq, OutRep*)

Parameters

GC,:	GC percentage
SeqLength,:	Length of sequences
NbSeq,:	Number of sequences
OutRep,:	Output repertory

Definition at line 22 of file RanRNA.py.

6.39.3 Member Function Documentation

6.39.3.1 def irna::iRNA_pred::RanRNA::RanRNA::GenerateFile (*self*)

Generate a multifasta with random sequences.

Definition at line 103 of file RanRNA.py.

Referenced by WriteFasta().

6.39.3.2 def irna::iRNA_pred::RanRNA::RanRNA::GenerateSeq (*self, seqlength*)

Generate a random sequence.

Returns

: a random sequence

Definition at line 64 of file RanRNA.py.

References GC, OutRep, SetLetters(), and WriteFasta().

Referenced by SetLetters(), and WriteFasta().

6.39.3.3 def irna::iRNA_pred::RanRNA::RanRNA::GetIntValues (*self, val, nbseq*)

Get integer random values.

Returns

: Table of integer random values

Definition at line 42 of file RanRNA.py.

Referenced by GetValues(), and WriteFasta().

6.39.3.4 def irna::iRNA_pred::RanRNA::RanRNA::GetValues (*self, seqlength*)

Get double random values.

Returns

: Table of double random Values

Definition at line 33 of file RanRNA.py.

References GetIntValues(), and SetLetters().

Referenced by SetLetters().

6.39.3.5 def irna::iRNA_pred::RanRNA::RanRNA::SetLetters (*self, L1, L2*)

Set the nucleotide.

Parameters

L1,:	Nucleotide 1
L2,:	Nucleotide 1

Returns

: Nucleotide

Definition at line 52 of file RanRNA.py.

References GenerateSeq(), and GetValues().

Referenced by GenerateSeq(), and GetValues().

6.39.3.6 def irna::iRNA_pred::RanRNA::RanRNA::WriteFasta (*self, fastafile, seq*)

Write the fasta.

Parameters

fastafile,:	Name of the fasta file
seq,:	Generated sequence

Definition at line 84 of file RanRNA.py.

References irna::iRNA_pred::Fasta::Fasta::fastafile, GenerateFile(), GenerateSeq(), GetIntValues(), NbSeq, SeqLength, irna::iRNA_pred::Fasta::Fasta::WriteFasta(), and WriteFasta().

Referenced by GenerateSeq(), and WriteFasta().

6.39.4 Member Data Documentation

6.39.4.1 irna::iRNA_pred::RanRNA::RanRNA::GC

Definition at line 22 of file RanRNA.py.

Referenced by irna::iRNA_pred::Fasta::Fasta::ExtractFasta(), and GenerateSeq().

6.39.4.2 irna::iRNA_pred::RanRNA::RanRNA::NbSeq

Definition at line 22 of file RanRNA.py.

Referenced by irna::iRNA_pred::Fasta::Fasta::ExtractFasta(), irna::iRNA_pred::Stat::Stat::GetGC(), and WriteFasta().

6.39.4.3 irna::iRNA_pred::RanRNA::RanRNA::OutRep

Definition at line 22 of file RanRNA.py.

Referenced by GenerateSeq().

6.39.4.4 irna::iRNA_pred::RanRNA::RanRNA::SeqLength

Definition at line 22 of file RanRNA.py.

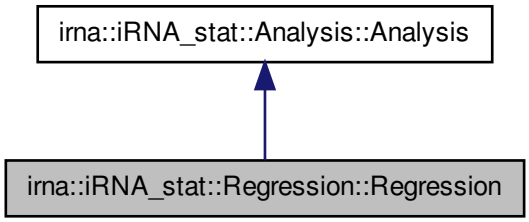
Referenced by WriteFasta().

The documentation for this class was generated from the following file:

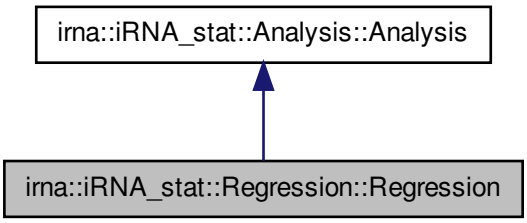
- /home/amine/workspace/iRNA/irna/iRNA_pred/RanRNA.py

6.40 irna::iRNA_stat::Regression::Regression Class Reference

Inheritance diagram for irna::iRNA_stat::Regression::Regression:



Collaboration diagram for irna::iRNA_stat::Regression::Regression:



Public Member Functions

- def __init__
  Instanciate Regression object.
- def ecdf_estimate
  Compute empirical cumulated distribution.
- def linear_regression
  Compute linear regression for each sRNA.
- def run

Public Attributes

- unique_sRNAidinint
- norm_score
- sRNAid_tab
- pValue_type
- cumneg
- curve_param

6.40.1 Detailed Description

Definition at line 13 of file Regression.py.

6.40.2 Constructor & Destructor Documentation

6.40.2.1 def irna::iRNA_stat::Regression::Regression::__init__ (*self, data*)

Instanciate Regression object.

Parameters

data,:	Communication object

Definition at line 20 of file Regression.py.

6.40.3 Member Function Documentation

6.40.3.1 def irna::iRNA_stat::Regression::Regression::ecdf_estimate (*self*)

Compute empirical cumulated distribution.

Definition at line 31 of file Regression.py.

References irna::iRNA_stat::Computer::Computer::cumneg, cumneg, irna::iRNA_stat::Computer::Computer::curve_param, curve_param, linear_regression(), irna::iRNA_stat::pValue::pValue::norm_score, norm_score, irna::iRNA_stat::Computer::Computer::norm_score, irna::iRNA_stat::NormScore::NormScore::norm_score, pValue_type, irna::iRNA_stat::Computer::Computer::pValue_type, sRNAid_tab, irna::iRNA_stat::Computer::Computer::sRNAid_tab, unique_sRNAidinint, and irna::iRNA_stat::Computer::Computer::unique_sRNAidinint.

Referenced by linear_regression().

6.40.3.2 def irna::iRNA_stat::Regression::Regression::linear_regression (*self*)

Compute linear regression for each sRNA.

Definition at line 55 of file Regression.py.

References irna::iRNA_stat::Analysis::Analysis::commun_values(), irna::iRNA_stat::Computer::Computer::cumneg, cumneg, irna::iRNA_stat::Computer::Computer::curve_param, curve_param, ecdf_estimate(), irna::iRNA_stat::pValue::pValue::norm_score, norm_score, irna::iRNA_stat::Computer::Computer::norm_score, irna::iRNA_stat::NormScore::NormScore::norm_score, run(), sRNAid_tab, irna::iRNA_stat::Computer::Computer::sRNAid_tab, unique_sRNAidinint, and irna::iRNA_stat::Computer::Computer::unique_sRNAidinint.

Referenced by ecdf_estimate(), and run().

6.40.3.3 def irna::iRNA_stat::Regression::Regression::run (*self*)

Definition at line 80 of file Regression.py.

References irna::iRNA_stat::Computer::Computer::cumneg, cumneg, irna::iRNA_stat::Computer::Computer::curve_param, curve_param, and linear_regression().

Referenced by linear_regression().

6.40.4 Member Data Documentation

6.40.4.1 irna::iRNA_stat::Regression::Regression::cumneg

Definition at line 31 of file Regression.py.

Referenced by ecdf_estimate(), linear_regression(), and run().

6.40.4.2 irna::iRNA_stat::Regression::Regression::curve_param

Definition at line 55 of file Regression.py.

Referenced by ecdf_estimate(), linear_regression(), and run().

6.40.4.3 irna::iRNA_stat::Regression::Regression::norm_score

Definition at line 20 of file Regression.py.

Referenced by ecdf_estimate(), and linear_regression().

6.40.4.4 irna::iRNA_stat::Regression::Regression::pValue_type

Definition at line 20 of file Regression.py.

Referenced by ecdf_estimate().

6.40.4.5 irna::iRNA_stat::Regression::Regression::sRNAid_tab

Definition at line 20 of file Regression.py.

Referenced by ecdf_estimate(), and linear_regression().

6.40.4.6 irna::iRNA_stat::Regression::Regression::unique_sRNAidinint

Definition at line 20 of file Regression.py.

Referenced by ecdf_estimate(), and linear_regression().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Regression.py

6.41 irna::iRNA_seq::Sequences::Sequences Class Reference

Public Member Functions

- def __init__

  Instanciate Sequence object.
- def parse

Get parsed data.

- def invers_compl

  Inverse and complemente gene sequence.

- def fractionalGene

  Get Gene between indicated set of position.

- def completeGene

  Get the complete Gene.

- def setGeneFunction

  Define the getGene function to use.

- def setdefaultmRNAlen

  Compute default mRNA length.

- def writemRNA

  Write mRNA multifasta file.

- def writesRNA

  Write sRNA multifasta file.

- def writeCorresponding

  Write corresponding geneID to genename for mRNA.

Public Attributes

- organism
- list_genes
- DNA

6.41.1 Detailed Description

Definition at line 9 of file Sequences.py.

6.41.2 Constructor & Destructor Documentation

6.41.2.1 def irna::iRNA_seq::Sequences::Sequences::__init__ (*self*)

Instanciate Sequence object.

Definition at line 15 of file Sequences.py.

6.41.3 Member Function Documentation

6.41.3.1 def irna::iRNA_seq::Sequences::Sequences::completeGene (*self, genedict, begin* = `None`, *end* = `None`)

Get the complete Gene.

Parameters

genedict,:	list of Gene dictionnary

Returns

: Complete gene sequence

Definition at line 63 of file Sequences.py.

References completeGene(), fractionalGene(), and setdefaultmRNAlen().

Referenced by completeGene(), invers_compl(), and writemRNA().

6.41.3.2 def irna::iRNA_seq::Sequences::Sequences::fractionalGene (*self, genedict, begin, end*)

Get Gene between indicated set of position.

Parameters

genedict,:	list of Gene dictionnary

Returns

: Fractionnal gene sequence

Definition at line 54 of file Sequences.py.

References DNA, and setGeneFunction().

Referenced by completeGene(), and invers_compl().

6.41.3.3 def irna::iRNA_seq::Sequences::Sequences::invers_compl (*self, gene*)

Inverse and complemente gene sequence.

Parameters

gene,:	Gene sequence

Definition at line 33 of file Sequences.py.

References completeGene(), DNA, and fractionalGene().

Referenced by parse(), and writemRNA().

6.41.3.4 def irna::iRNA_seq::Sequences::Sequences::parse (*self, obj*)

Get parsed data.

Parameters

obj,:	Data object

Definition at line 25 of file Sequences.py.

References invers_compl().

6.41.3.5 def irna::iRNA_seq::Sequences::Sequences::setdefaultmRNAlen (*self, begin, end, complete*)

Compute default mRNA length.

Parameters

begin,:	sRNA begin
end,:	sRNA end
complete,:	Complete flag

Returns

: RNA length

Definition at line 84 of file Sequences.py.

References list_genes, organism, setdefaultmRNAlen(), setGeneFunction(), and writemRNA().

Referenced by completeGene(), and setdefaultmRNAlen().

6.41.3.6 def irna::iRNA_seq::Sequences::Sequences::setGeneFunction (*self, complete*)

Define the getGene function to use.

Parameters

complete,:	Complete flag

Returns

: Function pointer

Definition at line 72 of file Sequences.py.

Referenced by fractionalGene(), and setdefaultmRNAlen().

6.41.3.7 def irna::iRNA_seq::Sequences::Sequences::writeCorresponding (*self, results*)

Write corresponding geneID to genename for mRNA.

Definition at line 162 of file Sequences.py.

Referenced by writesRNA().

6.41.3.8 def irna::iRNA_seq::Sequences::Sequences::writemRNA (*self, begin, end, results, complete*)

Write mRNA multifasta file.

Parameters

begin,:	sRNA begin
end,:	sRNA end
results,:	Path to result repertory
complete,:	Complete flag

Definition at line 101 of file Sequences.py.

References completeGene(), invers_compl(), organism, and writesRNA().

Referenced by setdefaultmRNAlen().

6.41.3.9 def irna::iRNA_seq::Sequences::Sequences::writesRNA (*self, results, srna_data*)

Write sRNA multifasta file.

Parameters

results,:	Path to result repertory
srna_data,:	sRNA list

Definition at line 133 of file Sequences.py.

References list_genes, organism, and writeCorresponding().

Referenced by writemRNA().

6.41.4 Member Data Documentation

6.41.4.1 irna::iRNA_seq::Sequences::Sequences::DNA

Definition at line 15 of file Sequences.py.

Referenced by fractionalGene(), and invers_compl().

6.41.4.2 irna::iRNA_seq::Sequences::Sequences::list_genes

Definition at line 15 of file Sequences.py.

Referenced by setdefaultmRNAlen(), and writesRNA().

6.41.4.3 irna::iRNA_seq::Sequences::Sequences::organism

Definition at line 15 of file Sequences.py.

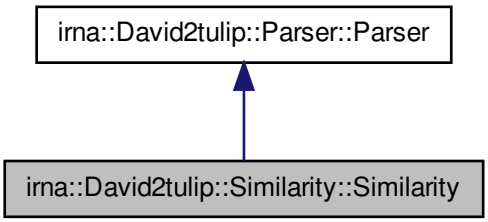
Referenced by setdefaultmRNAlen(), writemRNA(), and writesRNA().

The documentation for this class was generated from the following file:

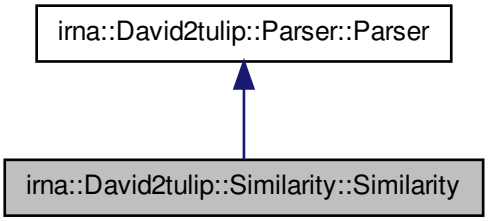
- /home/amine/workspace/iRNA/irna/iRNA_seq/Sequences.py

6.42 irna::David2tulip::Similarity::Similarity Class Reference

Inheritance diagram for irna::David2tulip::Similarity::Similarity:



Collaboration diagram for irna::David2tulip::Similarity::Similarity:



Public Member Functions

- def __init__

  Instanciate similarity parser object.
- def setdata

  Add sRNA - sRNA edges based on their similarity.

Public Attributes

- similarity_file

6.42.1 Detailed Description

Definition at line 11 of file Similarity.py.

6.42.2 Constructor & Destructor Documentation

6.42.2.1 def irna::David2tulip::Similarity::Similarity::__init__ (*self, similarity_file*)

Instanciate similarity parser object.

Parameters

similarity_file,:	Similarity file

Definition at line 18 of file Similarity.py.

6.42.3 Member Function Documentation

6.42.3.1 def irna::David2tulip::Similarity::Similarity::setdata (*self, node_objects, edge_objects*)

Add sRNA - sRNA edges based on their similarity.

Parameters

node_objects,:	list of node objects
edge_objects,:	list of edge objects

Definition at line 28 of file Similarity.py.

References irna::David2tulip::Parser::Parser::addelements(), irna::David2tulip::Parser::Parser::getlinknode(), and similarity_file.

6.42.4 Member Data Documentation

6.42.4.1 irna::David2tulip::Similarity::Similarity::similarity_file

Definition at line 18 of file Similarity.py.

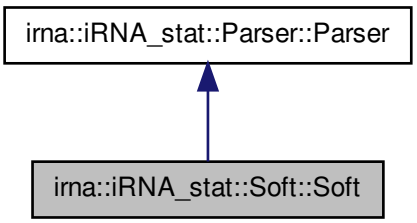
Referenced by setdata().

The documentation for this class was generated from the following file:

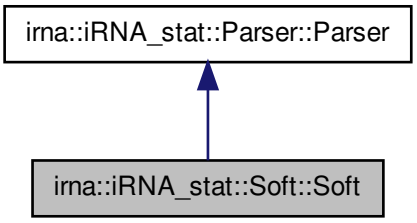
- /home/amine/workspace/iRNA/irna/David2tulip/Similarity.py

6.43 irna::iRNA_stat::Soft::Soft Class Reference

Inheritance diagram for irna::iRNA_stat::Soft::Soft:



Collaboration diagram for irna::iRNA_stat::Soft::Soft:



Public Member Functions

- def __init__
  Instanciate soft object.
- def getSoftinf
- def getSoftnum
- def __cmp__
  General method to compare node based on the name.

Public Attributes

- id
- type_sol
- score_type

6.43.1 Detailed Description

Definition at line 10 of file Soft.py.

6.43.2 Constructor & Destructor Documentation

6.43.2.1 def irna::iRNA_stat::Soft::Soft::__init__ (*self, soft_file*)

Instanciate soft object.

Definition at line 17 of file Soft.py.

References getSoftinf().

6.43.3 Member Function Documentation

6.43.3.1 def irna::iRNA_stat::Soft::Soft::__cmp__ (*self, other*)

General method to compare node based on the name.

Parameters

other,:	Compared value

Definition at line 57 of file Soft.py.

Referenced by getSoftnum().

6.43.3.2 def irna::iRNA_stat::Soft::Soft::getSoftinf (*self, soft_file*)

Parameters

soft_file,:	

Definition at line 25 of file Soft.py.

Referenced by __init__().

6.43.3.3 def irna::iRNA_stat::Soft::Soft::getSoftnum (*self, name*)

Parameters

name,:	

Definition at line 45 of file Soft.py.

References __cmp__(), and id.

6.43.4 Member Data Documentation

6.43.4.1 irna::iRNA_stat::Soft::Soft::id

Definition at line 25 of file Soft.py.

Referenced by getSoftnum().

6.43.4.2 irna::iRNA_stat::Soft::Soft::score_type

Definition at line 25 of file Soft.py.

6.43.4.3 irna::iRNA_stat::Soft::Soft::type_sol

Definition at line 25 of file Soft.py.

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Soft.py

6.44 irna::David2tulip::Sqlite_manager::Sqlite_manager Class Reference

: Handle database connection, disconnection and querying.

Public Member Functions

- def __init__

Instanciate Sqlite_manager object.

- def createSQLdb

  Create the database.
- def connectDB

  Connect to the database.
- def disconnectDB

  Disconnect the database.
- def disconnectDB2

  Disconnect the database and copy on to the disk.
- def setSoft

  Insert soft name.
- def setRNA

  Insert RNA.
- def setInteract

  Insert interaction.
- def commitRetry

  Retry the commit operation.
- def setContact

  Insert contacts.
- def getSoft

  Get if software exist by its id.
- def getSoftname

  Get if software exist by its id.
- def getidSoftsbyname

  Get id of softwares corresponding to one name.
- def getallRNAlength

  Get all RNA length.
- def getallRNA

  Get all RNA name from one type.
- def getRNA

  Get an RNA by its name and type.
- def getsRNAlenbyIntid

  Get an sRNA length from an interaction.
- def getAllsRNAlenbyIntid

  Get an sRNA length from an interaction.
- def getsRNAidbyIntid

  Get an sRNAid from an interaction.
- def getAllsRNAidbyIntid

  Get an sRNAid from an interaction.
- def getmRNAlenbyIntid

  Get an mRNA from an interaction.
- def getAllmRNAlenbyIntid

  Get an mRNA from an interaction.

- def getNbInteract

  Count the number of interaction for one software.
- def getInteract

  Get interactions of one software.
- def getScore

  Get the score of an interaction.
- def getAllScore

  Get the score for several interactions.
- def getAllSoft

  Get all the software.
- def getsRNAbyIntid

  Get the name of an sRNA from interaction key.
- def getmRNAbyIntid

  Get the name of an mRNA from interaction key.
- def listit

  Convert fetchall result into list of list.
- def listscore

  Unlist score.
- def getPositionsbyIntid

  Get position for one interaction.
- def getallsRNA

  Get all sRNA.
- def getallsRNAname

  Get an sRNA name and unlist.
- def getIntbysRNAid

  Get the interactid for an sRNA.
- def IndexInteractidOnContact

  Create index on interactid for contact.
- def IndexSrnaidOnInteract

  Create index on srnaid for interact.
- def IndexMrnaidOnInteract

  Create index on mrnaid for interact.
- def createIndexes

  Create index for most use connection.

Public Attributes

- db_path
- db_file
- fastmode
- conn2
- conn
- cur

6.44.1 Detailed Description

: Handle database connection, disconnection and querying.

Definition at line 16 of file Sqlite_manager.py.

6.44.2 Constructor & Destructor Documentation

6.44.2.1 def irna::David2tulip::Sqlite_manager::Sqlite_manager::__init__ (*self, result, db_file, fastmode*)

Instanciate Sqlite_manager object.

Parameters

result,:	Path where to write the database
db_file,:	SQlite db file
fastmode,:	fastmode flag

Definition at line 25 of file Sqlite_manager.py.

6.44.3 Member Function Documentation

6.44.3.1 def irna::David2tulip::Sqlite_manager::Sqlite_manager::commitRetry (*self*)

Retry the commit operation.

Returns

: State of the commit

Definition at line 154 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setContact(), setContact(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::setContact(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setInteract(), setInteract(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setRNA(), setRNA(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::setRNA(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setSoft(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::setSoft(), and setSoft().

6.44.3.2 def irna::David2tulip::Sqlite_manager::Sqlite_manager::connectDB (*self*)

Connect to the database.

Definition at line 48 of file Sqlite_manager.py.

Referenced by createSQLdb().

6.44.3.3 def irna::David2tulip::Sqlite_manager::Sqlite_manager::createIndexes (*self*)

Create index for most use connection.

Definition at line 531 of file Sqlite_manager.py.

Referenced by getallsRNAname().

6.44.3.4 def irna::David2tulip::Sqlite_manager::Sqlite_manager::createSQLdb (*self*)

Create the database.

Definition at line 34 of file Sqlite_manager.py.

References conn2, connectDB(), db_file, and db_path.

6.44.3.5 def irna::David2tulip::Sqlite_manager::Sqlite_manager::disconnectDB (*self*)

Disconnect the database.

Definition at line 63 of file Sqlite_manager.py.

References conn, conn2, disconnectDB2(), irna::David2tulip::Files::Files::fastmode, and fastmode.

6.44.3.6 def irna::David2tulip::Sqlite_manager::Sqlite_manager::disconnectDB2 (*self*)

Disconnect the database and copy on to the disk.

Definition at line 74 of file Sqlite_manager.py.

References cur, and setSoft().

Referenced by disconnectDB().

6.44.3.7 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getAllmRNAlenbyIntid (*self, table_interactid*)

Get an mRNA from an interaction.

Parameters

table_interactid,:	table of interaction id

Returns

: List of mRNA length

Definition at line 341 of file Sqlite_manager.py.

References getScore().

Referenced by getAllsRNAidbyIntid().

6.44.3.8 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getallRNA (*self, type_RNA*)

Get all RNA name from one type.

Parameters

type_RNA,:	Type of RNA

Returns

: list of RNA

Definition at line 240 of file Sqlite_manager.py.

References getsRNAlenbyIntid().

Referenced by getidSoftsbyname().

6.44.3.9 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getallRNAlength (*self, type_RNA*)

Get all RNA length.

Parameters

type_RNA,:	Type of RNA

Returns

: list of RNA with their length

Definition at line 228 of file Sqlite_manager.py.

References getRNA().

Referenced by getSoftname().

6.44.3.10 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getAllScore (*self, table_interactid*)

Get the score for several interactions.

Parameters

table_interactid,:	list of interaction key

Returns

: List of score

Definition at line 395 of file Sqlite_manager.py.

References getmRNAbyIntid(), and listit().

Referenced by getNbInteract().

6.44.3.11 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getAllSoft (*self*)

Get all the software.

Returns

: List of software

Definition at line 409 of file Sqlite_manager.py.

References listit(), and listscore().

Referenced by getInteract().

6.44.3.12 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getallsRNA (*self*)

Get all sRNA.

Returns

: List of rnaid

Definition at line 474 of file Sqlite_manager.py.

References IndexMrnaidOnInteract().

Referenced by getmRNAbyIntid().

6.44.3.13 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getAllsRNAidbyIntid (*self, table_interactid*)

Get an sRNAid from an interaction.

Parameters

interactid,:	Interaction id

Returns

: List of sRNAid

Definition at line 310 of file Sqlite_manager.py.

References getAllmRNAlenbyIntid(), and getmRNAbyIntid().

Referenced by getAllsRNAlenbyIntid().

6.44.3.14 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getAllsRNAlenbyIntid (*self, table_interactid*)

Get an sRNA length from an interaction.

Parameters

table_interactid,:	table of interaction id

Returns

: list of sRNA length

Definition at line 280 of file Sqlite_manager.py.

References getAllsRNAidbyIntid().

Referenced by getRNA().

6.44.3.15 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getallsRNAname (*self*)

Get an sRNA name and unlist.

Returns

: List of rnaid

Definition at line 485 of file Sqlite_manager.py.

References createIndexes(), IndexInteractidOnContact(), IndexMrnaidOnInteract(), and IndexSrnaidOnInteract().

Referenced by listit().

6.44.3.16 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getidSoftsbyname (*self, name*)

Get id of softwares corresponding to one name.

Parameters

name,:	name of a software

Returns

: list of softid

Definition at line 216 of file Sqlite_manager.py.

References getallRNA().

Referenced by getSoft().

6.44.3.17 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getIntbysRNAid (*self, srnaid*)

Get the interactid for an sRNA.

Parameters

srnaid,:	rna key

Returns

: List of interactid

Definition at line 497 of file Sqlite_manager.py.

Referenced by listscore().

6.44.3.18 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getInteract (*self, softid*)

Get interactions of one software.

Parameters

softid,:	soft key

Returns

: List of interactid

Definition at line 371 of file Sqlite_manager.py.

References getAllSoft(), and listscore().

Referenced by getmRNAlenbyIntid().

6.44.3.19 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getmRNAbyIntid (*self, interactid*)

Get the name of an mRNA from interaction key.

Parameters

interactid,:	interaction key

Returns

: name of the mRNA

Definition at line 433 of file Sqlite_manager.py.

References getallsRNA().

Referenced by getAllScore(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getAllsRNAidbyIntid(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getAllsRNAidbyIntid(), and getAllsRNAidbyIntid().

6.44.3.20 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getmRNAlenbyIntid (*self, interactid*)

Get an mRNA from an interaction.

Parameters

interactid,:	Interaction id

Returns

: mRNA length

Definition at line 327 of file Sqlite_manager.py.

References getInteract(), and getNbInteract().

Referenced by getsRNAidbyIntid().

6.44.3.21 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getNbInteract (*self, softid*)

Count the number of interaction for one software.

Parameters

softid,:	soft key

Returns

: Number of interaction

Definition at line 358 of file Sqlite_manager.py.

References getAllScore(), and listscore().

Referenced by getmRNAlenbyIntid().

6.44.3.22 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getPositionsbyIntid (*self, interactid*)

Get position for one interaction.

Parameters

interactid,:	interact key

Returns

: List of position

Definition at line 463 of file Sqlite_manager.py.

References IndexInteractidOnContact(), and IndexSrnaidOnInteract().

Referenced by getsRNAbyIntid().

6.44.3.23 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getRNA (*self, name, type_RNA*)

Get an RNA by its name and type.

Parameters

name,:	RNA name
type,:	RNA type

Returns

: A rnaid

Definition at line 254 of file Sqlite_manager.py.

References getAllsRNAlenbyIntid().

Referenced by getallRNAlength().

6.44.3.24 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getScore (*self, interactid*)

Get the score of an interaction.

Parameters

interactid,:	interaction key

Returns

: List of score

Definition at line 383 of file Sqlite_manager.py.

References getsRNAbyIntid().

Referenced by getAllmRNAlenbyIntid().

6.44.3.25 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getSoft (*self, softid*)

Get if software exist by its id.

Parameters

softid,:	Soft key

Returns

: A softid

Definition at line 192 of file Sqlite_manager.py.

References getidSoftsbyname().

Referenced by setContact().

6.44.3.26 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getSoftname (*self, softid*)

Get if software exist by its id.

Parameters

softid,:	Soft key

Returns

: A software name

Definition at line 204 of file Sqlite_manager.py.

References getallRNAlength(), and listscore().

Referenced by setContact().

6.44.3.27 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getsRNAbyIntid (*self, interactid*)

Get the name of an sRNA from interaction key.

Parameters

interactid,:	interaction key

Returns

: name of the sRNA

Definition at line 421 of file Sqlite_manager.py.

References getPositionsbyIntid().

Referenced by getScore(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getsRNAlenbyIntid(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getsRNAlenbyIntid(), and getsRNAlenbyIntid().

6.44.3.28 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getsRNAidbyIntid (*self, interactid*)

Get an sRNAid from an interaction.

Parameters

interactid,:	Interaction id

Definition at line 296 of file Sqlite_manager.py.

References getmRNAlenbyIntid().

Referenced by getsRNAlenbyIntid().

6.44.3.29 def irna::David2tulip::Sqlite_manager::Sqlite_manager::getsRNAlenbyIntid (*self, interactid*)

Get an sRNA length from an interaction.

Parameters

interactid,:	Interaction id

Returns

: sRNA length

Definition at line 266 of file Sqlite_manager.py.

References getsRNAbyIntid(), and getsRNAidbyIntid().

Referenced by getallRNA().

6.44.3.30 def irna::David2tulip::Sqlite_manager::Sqlite_manager::IndexInteractidOnContact (*self*)

Create index on interactid for contact.

Definition at line 507 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallsRNAname(), getallsRNAname(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getallsRNAname(), and getPositionsbyIntid().

6.44.3.31 def irna::David2tulip::Sqlite_manager::Sqlite_manager::IndexMrnaidOnInteract (*self*)

Create index on mrnaid for interact.

Definition at line 523 of file Sqlite_manager.py.

Referenced by getallsRNA(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallsRNAname(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getallsRNAname(), and getallsRNAname().

6.44.3.32 def irna::David2tulip::Sqlite_manager::Sqlite_manager::IndexSrnaidOnInteract (*self*)

Create index on srnaid for interact.

Definition at line 515 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallsRNAname(), getallsRNAname(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getallsRNAname(), and getPositionsbyIntid().

6.44.3.33 def irna::David2tulip::Sqlite_manager::Sqlite_manager::listit (*self, t*)

Convert fetchall result into list of list.

Returns

: List of list

Definition at line 444 of file Sqlite_manager.py.

References getallsRNAname().

Referenced by getAllScore(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getAllSoft(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getAllSoft(), and getAllSoft().

6.44.3.34 def irna::David2tulip::Sqlite_manager::Sqlite_manager::listscore (*self, score*)

Unlist score.

Returns

: List of score

Definition at line 452 of file Sqlite_manager.py.

References getIntbysRNAid(), and listscore().

Referenced by getAllSoft(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getInteract(), getInteract(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getInteract(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getNbInteract(), getNbInteract(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getNbInteract(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getSoftname(), getSoftname(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getSoftname(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::listscore(), listscore(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::listscore().

6.44.3.35 def irna::David2tulip::Sqlite_manager::Sqlite_manager::setContact (*self, interactid, tab*)

Insert contacts.

Parameters

interactid,:	Interaction key
tab,:	Table of contact

Definition at line 169 of file Sqlite_manager.py.

References commitRetry(), getSoft(), and getSoftname().

Referenced by setInteract().

6.44.3.36 def irna::David2tulip::Sqlite_manager::Sqlite_manager::setInteract (*self, sRNAid, mRNAid, softid*)

Insert interaction.

Parameters

sRNAid,:	sRNA key
mRNAid,:	mRNA key
softid,:	soft key

Returns

: Last insert id

Definition at line 137 of file Sqlite_manager.py.

References commitRetry(), and setContact().

Referenced by setRNA().

6.44.3.37 def irna::David2tulip::Sqlite_manager::Sqlite_manager::setRNA (*self, RNAtab*)

Insert RNA.

Parameters

RNAtab,:	Table of RNA

Definition at line 107 of file Sqlite_manager.py.

References commitRetry(), cur, and setInteract().

Referenced by setSoft().

6.44.3.38 def irna::David2tulip::Sqlite_manager::Sqlite_manager::setSoft (*self, name*)

Insert soft name.

Parameters

name,:	Soft name

Returns

: Last insert id

Definition at line 90 of file Sqlite_manager.py.

References commitRetry(), and setRNA().

Referenced by disconnectDB2().

6.44.4 Member Data Documentation

6.44.4.1 irna::David2tulip::Sqlite_manager::Sqlite_manager::conn

Definition at line 48 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB(), disconnectDB(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::disconnectDB().

6.44.4.2 irna::David2tulip::Sqlite_manager::Sqlite_manager::conn2

Definition at line 48 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::createSQLdb(), createSQLdb(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::createSQLdb(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB(), disconnectDB(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::disconnectDB().

6.44.4.3 irna::David2tulip::Sqlite_manager::Sqlite_manager::cur

Definition at line 48 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB2(), disconnectDB2(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::disconnectDB2(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setRNA(), setRNA(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::setRNA().

6.44.4.4 irna::David2tulip::Sqlite_manager::Sqlite_manager::db_file

Definition at line 25 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::createSQLdb(), createSQLdb(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::createSQLdb().

6.44.4.5 irna::David2tulip::Sqlite_manager::Sqlite_manager::db_path

Definition at line 25 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::createSQLdb(), createSQLdb(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::createSQLdb().

6.44.4.6 irna::David2tulip::Sqlite_manager::Sqlite_manager::fastmode

Definition at line 25 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::disconnectDB(), disconnectDB(), irna::iRNA_stat::Files::Files::getfiles(), and irna::iRNA_pred::Files::Files::getfiles().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/David2tulip/Sqlite_manager.py

6.45 irna::iRNA_pred::Sqlite_manager::Sqlite_manager Class Reference

: Handle database connection, disconnection and querying.

Public Member Functions

- def __init__

  Instanciate Sqlite_manager object.

- def createSQLdb

  Create the database.
- def connectDB

  Connect to the database.
- def disconnectDB

  Disconnect the database.
- def disconnectDB2

  Disconnect the database and copy on to the disk.
- def setSoft

  Insert soft name.
- def setRNA

  Insert RNA.
- def setInteract

  Insert interaction.
- def commitRetry

  Retry the commit operation.
- def setContact

  Insert contacts.
- def getSoft

  Get if software exist by its id.
- def getSoftname

  Get if software exist by its id.
- def getidSoftsbyname

  Get id of softwares corresponding to one name.
- def getallRNAlength

  Get all RNA length.
- def getallRNA

  Get all RNA name from one type.
- def getRNA

  Get an RNA by its name and type.
- def getsRNAlenbyIntid

  Get an sRNA length from an interaction.
- def getAllsRNAlenbyIntid

  Get an sRNA length from an interaction.
- def getsRNAidbyIntid

  Get an sRNAid from an interaction.
- def getAllsRNAidbyIntid

  Get an sRNAid from an interaction.
- def getmRNAlenbyIntid

  Get an mRNA from an interaction.
- def getAllmRNAlenbyIntid

  Get an mRNA from an interaction.
- def getNbInteract

Count the number of interaction for one software.

- def getInteract

  Get interactions of one software.
- def getScore

  Get the score of an interaction.
- def getAllScore

  Get the score for several interactions.
- def getAllSoft

  Get all the software.
- def getsRNAbyIntid

  Get the name of an sRNA from interaction key.
- def getmRNAbyIntid

  Get the name of an mRNA from interaction key.
- def listit

  Convert fetchall result into list of list.
- def listscore

  Unlist score.
- def getPositionsbyIntid

  Get position for one interaction.
- def getallsRNA

  Get all sRNA.
- def getallsRNAname

  Get an sRNA name and unlist.
- def getIntbysRNAid

  Get the interactid for an sRNA.
- def IndexInteractidOnContact

  Create index on interactid for contact.
- def IndexSrnaidOnInteract

  Create index on srnaid for interact.
- def IndexMrnaidOnInteract

  Create index on mrnaid for interact.
- def createIndexes

  Create index for most use connection.

Public Attributes

- db_path
- db_file
- fastmode
- conn2
- conn
- cur

6.45.1 Detailed Description

: Handle database connection, disconnection and querying.

Definition at line 16 of file Sqlite_manager.py.

6.45.2 Constructor & Destructor Documentation

6.45.2.1 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::__init__ (*self, result, db_file, fastmode*)

Instanciate Sqlite_manager object.

Parameters

result,:	Path where to write the database
db_file,:	SQlite db file
fastmode,:	fastmode flag

Definition at line 25 of file Sqlite_manager.py.

6.45.3 Member Function Documentation

6.45.3.1 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::commitRetry (*self*)

Retry the commit operation.

Returns

: State of the commit

Definition at line 154 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setContact(), setContact(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setInteract(), setInteract(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setRNA(), setRNA(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setSoft(), and setSoft().

6.45.3.2 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::connectDB (*self*)

Connect to the database.

Definition at line 48 of file Sqlite_manager.py.

Referenced by createSQLdb().

6.45.3.3 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::createIndexes (*self*)

Create index for most use connection.

Definition at line 531 of file Sqlite_manager.py.

Referenced by getallsRNAname().

6.45.3.4 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::createSQLdb (*self*)

Create the database.

Definition at line 34 of file Sqlite_manager.py.

References irna::David2tulip::Sqlite_manager::Sqlite_manager::conn2, conn2, connectDB(), irna::David2tulip::Sqlite_manager::Sqlite_manager::db_file, db_file, irna::David2tulip::Sqlite_manager::Sqlite_manager::db_path, and db_path.

6.45.3.5 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::disconnectDB (*self*)

Disconnect the database.

Definition at line 63 of file Sqlite_manager.py.

References irna::David2tulip::Sqlite_manager::Sqlite_manager::conn, conn, irna::David2tulip::Sqlite_manager::Sqlite_manager::conn2, conn2, disconnectDB2(), irna::David2tulip::Files::Files::fastmode, irna::iRNA_pred::Files::Files::fastmode, irna::David2tulip::Sqlite_manager::Sqlite_manager::fastmode, and fastmode.

6.45.3.6 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::disconnectDB2 (*self*)

Disconnect the database and copy on to the disk.

Definition at line 74 of file Sqlite_manager.py.

References irna::David2tulip::Sqlite_manager::Sqlite_manager::cur, cur, and setSoft().

Referenced by disconnectDB().

6.45.3.7 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getAllmRNAlenbyIntid (*self, table_interactid*)

Get an mRNA from an interaction.

Parameters

table_interactid,:	table of interaction id

Returns

: List of mRNA length

Definition at line 341 of file Sqlite_manager.py.

References getScore().

Referenced by getAllsRNAidbyIntid().

6.45.3.8 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getallRNA (*self, type_RNA*)

Get all RNA name from one type.

Parameters

type_RNA,:	Type of RNA

Returns

: list of RNA

Definition at line 240 of file Sqlite_manager.py.

References getsRNAlenbyIntid().

Referenced by getidSoftsbyname().

6.45.3.9 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getallRNAlength (*self, type_RNA*)

Get all RNA length.

Parameters

type_RNA,:	Type of RNA

Returns

: list of RNA with their length

Definition at line 228 of file Sqlite_manager.py.

References getRNA().

Referenced by getSoftname().

6.45.3.10 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getAllScore (*self, table_interactid*)

Get the score for several interactions.

Parameters

table_interactid,:	list of interaction key

Returns

: List of score

Definition at line 395 of file Sqlite_manager.py.

References getmRNAbyIntid(), and listit().

Referenced by getNbInteract().

6.45.3.11 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getAllSoft (*self*)

Get all the software.

Returns

: List of software

Definition at line 409 of file Sqlite_manager.py.

References irna::David2tulip::Sqlite_manager::Sqlite_manager::listit(), listit(), and listscore().

Referenced by getInteract().

6.45.3.12 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getallsRNA (*self*)

Get all sRNA.

Returns

: List of rnaid

Definition at line 474 of file Sqlite_manager.py.

References IndexMrnaidOnInteract().

Referenced by getmRNAbyIntid().

6.45.3.13 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getAllsRNAidbyIntid (*self, table_interactid*)

Get an sRNAid from an interaction.

Parameters

interactid,:	Interaction id

Returns

: List of sRNAid

Definition at line 310 of file Sqlite_manager.py.

References getAllmRNAlenbyIntid(), getmRNAbyIntid(), and irna::David2tulip::Sqlite_manager::Sqlite_manager::getmRNAbyIntid().

Referenced by getAllsRNAlenbyIntid().

6.45.3.14 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getAllsRNAlenbyIntid (*self, table_interactid*)

Get an sRNA length from an interaction.

Parameters

table_interactid,:	table of interaction id

Returns

: list of sRNA length

Definition at line 280 of file Sqlite_manager.py.

References getAllsRNAidbyIntid().

Referenced by getRNA().

6.45.3.15 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getallsRNAname (*self*)

Get an sRNA name and unlist.

Returns

: List of rnaid

Definition at line 485 of file Sqlite_manager.py.

References createIndexes(), irna::David2tulip::Sqlite_manager::Sqlite_manager::IndexInteractidOnContact(), IndexInteractidOnContact(), IndexMrnaidOnInteract(), irna::David2tulip::Sqlite_manager::Sqlite_manager::IndexMrnaidOnInteract(), irna::David2tulip::Sqlite_manager::Sqlite_manager::IndexSrnaidOnInteract(), and IndexSrnaidOnInteract().

Referenced by listit().

6.45.3.16 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getidSoftsbyname (*self, name*)

Get id of softwares corresponding to one name.

Parameters

name,:	name of a software

Returns

: list of softid

Definition at line 216 of file Sqlite_manager.py.

References getallRNA().

Referenced by getSoft().

6.45.3.17 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getIntbysRNAid (*self, srnaid*)

Get the interactid for an sRNA.

Parameters

srnaid,:	rna key

Returns

: List of interactid

Definition at line 497 of file Sqlite_manager.py.

Referenced by listscore().

6.45.3.18 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getInteract (*self, softid*)

Get interactions of one software.

Parameters

softid,:	soft key

Returns

: List of interactid

Definition at line 371 of file Sqlite_manager.py.

References getAllSoft(), irna::David2tulip::Sqlite_manager::Sqlite_manager::listscore(), and listscore().

Referenced by getmRNAlenbyIntid().

6.45.3.19 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getmRNAbyIntid (*self, interactid*)

Get the name of an mRNA from interaction key.

Parameters

interactid,:	interaction key

Returns

: name of the mRNA

Definition at line 433 of file Sqlite_manager.py.

References getallsRNA().

Referenced by getAllScore(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getAllsRNAidbyIntid(), and getAllsRNAidbyIntid().

6.45.3.20 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getmRNAlenbyIntid (*self, interactid*)

Get an mRNA from an interaction.

Parameters

interactid,:	Interaction id

Returns

: mRNA length

Definition at line 327 of file Sqlite_manager.py.

References getInteract(), and getNbInteract().

Referenced by getsRNAidbyIntid().

6.45.3.21 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getNbInteract (*self, softid*)

Count the number of interaction for one software.

Parameters

softid,:	soft key

Returns

: Number of interaction

Definition at line 358 of file Sqlite_manager.py.

References getAllScore(), irna::David2tulip::Sqlite_manager::Sqlite_manager::listscore(), and listscore().

Referenced by getmRNAlenbyIntid().

6.45.3.22 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getPositionsbyIntid (*self, interactid*)

Get position for one interaction.

Parameters

interactid,:	interact key

Returns

: List of position

Definition at line 463 of file Sqlite_manager.py.

References IndexInteractidOnContact(), and IndexSrnaidOnInteract().

Referenced by getsRNAbyIntid().

6.45.3.23 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getRNA (*self, name, type_RNA*)

Get an RNA by its name and type.

Parameters

name,:	RNA name
type,:	RNA type

Returns

: A rnaid

Definition at line 254 of file Sqlite_manager.py.

References getAllsRNAlenbyIntid().

Referenced by getallRNAlength().

6.45.3.24 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getScore (*self, interactid*)

Get the score of an interaction.

Parameters

interactid,:	interaction key

Returns

: List of score

Definition at line 383 of file Sqlite_manager.py.

References getsRNAbyIntid().

Referenced by getAllmRNAlenbyIntid().

6.45.3.25 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getSoft (*self, softid*)

Get if software exist by its id.

Parameters

softid,:	Soft key

Returns

: A softid

Definition at line 192 of file Sqlite_manager.py.

References getidSoftsbyname().

Referenced by setContact().

6.45.3.26 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getSoftname (*self, softid*)

Get if software exist by its id.

Parameters

softid,:	Soft key

Returns

: A software name

Definition at line 204 of file Sqlite_manager.py.

References getallRNAlength(), irna::David2tulip::Sqlite_manager::Sqlite_manager::listscore(), and listscore().

Referenced by setContact().

6.45.3.27 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getsRNAbyIntid (*self, interactid*)

Get the name of an sRNA from interaction key.

Parameters

interactid,:	interaction key

Returns

: name of the sRNA

Definition at line 421 of file Sqlite_manager.py.

References getPositionsbyIntid().

Referenced by getScore(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getsRNAlenbyIntid(), and getsRNAlenbyIntid().

6.45.3.28 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getsRNAidbyIntid (*self, interactid*)

Get an sRNAid from an interaction.

Parameters

interactid,:	Interaction id

Definition at line 296 of file Sqlite_manager.py.

References getmRNAlenbyIntid().

Referenced by getsRNAlenbyIntid().

6.45.3.29 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getsRNAlenbyIntid (*self, interactid*)

Get an sRNA length from an interaction.

Parameters

interactid,:	Interaction id

Returns

: sRNA length

Definition at line 266 of file Sqlite_manager.py.

References irna::David2tulip::Sqlite_manager::Sqlite_manager::getsRNAbyIntid(), getsRNAbyIntid(), and getsRNAidbyIntid().

Referenced by getallRNA().

6.45.3.30 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::IndexInteractidOnContact (*self*)

Create index on interactid for contact.

Definition at line 507 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallsRNAname(), getallsRNAname(), and getPositionsbyIntid().

6.45.3.31 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::IndexMrnaidOnInteract (*self*)

Create index on mrnaid for interact.

Definition at line 523 of file Sqlite_manager.py.

Referenced by getallsRNA(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallsRNAname(), and getallsRNAname().

6.45.3.32 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::IndexSrnaidOnInteract (*self*)

Create index on srnaid for interact.

Definition at line 515 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallsRNAname(), getallsRNAname(), and getPositionsbyIntid().

6.45.3.33 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::listit (*self, t*)

Convert fetchall result into list of list.

Returns

: List of list

Definition at line 444 of file Sqlite_manager.py.

References getallsRNAname().

Referenced by getAllScore(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getAllSoft(), and getAllSoft().

6.45.3.34 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::listscore (*self, score*)

Unlist score.

Returns

: List of score

Definition at line 452 of file Sqlite_manager.py.

References getIntbysRNAid(), irna::David2tulip::Sqlite_manager::Sqlite_manager::listscore(), and listscore().

Referenced by getAllSoft(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getInteract(), getInteract(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getNbInteract(), getNbInteract(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getSoftname(), getSoftname(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::listscore(), and listscore().

6.45.3.35 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::setContact (*self, interactid, tab*)

Insert contacts.

Parameters

interactid,:	Interaction key
tab,:	Table of contact

Definition at line 169 of file Sqlite_manager.py.

References irna::David2tulip::Sqlite_manager::Sqlite_manager::commitRetry(), commitRetry(), getSoft(), and getSoftname().

Referenced by setInteract().

6.45.3.36 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::setInteract (*self, sRNAid, mRNAid, softid*)

Insert interaction.

Parameters

sRNAid,:	sRNA key
mRNAid,:	mRNA key
softid,:	soft key

Returns

: Last insert id

Definition at line 137 of file Sqlite_manager.py.

References commitRetry(), and setContact().

Referenced by setRNA().

6.45.3.37 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::setRNA (*self, RNAtab*)

Insert RNA.

Parameters

RNAtab,:	Table of RNA

Definition at line 107 of file Sqlite_manager.py.

References irna::David2tulip::Sqlite_manager::Sqlite_manager::commitRetry(), commitRetry(), irna::David2tulip::Sqlite_manager::Sqlite_manager::cur, cur, and setInteract().

Referenced by setSoft().

6.45.3.38 def irna::iRNA_pred::Sqlite_manager::Sqlite_manager::setSoft (*self, name*)

Insert soft name.

Parameters

name,:	Soft name

Returns

: Last insert id

Definition at line 90 of file Sqlite_manager.py.

References irna::David2tulip::Sqlite_manager::Sqlite_manager::commitRetry(), commitRetry(), and setRNA().

Referenced by disconnectDB2().

6.45.4 Member Data Documentation

6.45.4.1 irna::iRNA_pred::Sqlite_manager::Sqlite_manager::conn

Definition at line 48 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB(), and disconnectDB().

6.45.4.2 irna::iRNA_pred::Sqlite_manager::Sqlite_manager::conn2

Definition at line 48 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::createSQLdb(), createSQLdb(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB(), and disconnectDB().

6.45.4.3 irna::iRNA_pred::Sqlite_manager::Sqlite_manager::cur

Definition at line 48 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB2(), disconnectDB2(), irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setRNA(), and setRNA().

6.45.4.4 irna::iRNA_pred::Sqlite_manager::Sqlite_manager::db_file

Definition at line 25 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::createSQLdb(), and createSQLdb().

6.45.4.5 irna::iRNA_pred::Sqlite_manager::Sqlite_manager::db_path

Definition at line 25 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::createSQLdb(), and createSQLdb().

6.45.4.6 irna::iRNA_pred::Sqlite_manager::Sqlite_manager::fastmode

Definition at line 25 of file Sqlite_manager.py.

Referenced by irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB(), disconnectDB(), and irna::iRNA_stat::Files::Files::getfiles().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_pred/Sqlite_manager.py

6.46 irna::iRNA_stat::Sqlite_manager::Sqlite_manager Class Reference

Public Member Functions

- def __init__

Instanciate Sqlite_manager object.

- def createSQLdb

  Create the database.
- def connectDB

  Connect to the database.
- def disconnectDB

  Disconnect the database.
- def disconnectDB2

  Disconnect the database and copy on to the disk.
- def setSoft

  Insert soft name.
- def setRNA

  Insert RNA.
- def setInteract

  Insert interaction.
- def commitRetry

  Retry the commit operation.
- def setContact

  Insert contacts.
- def getSoft

  Get if software exist by its id.
- def getSoftname

  Get if software exist by its id.
- def getidSoftsbyname

  Get id of softwares corresponding to one name.
- def getallRNAlength

  Get all RNA length.
- def getallRNA

  Get all RNA name from one type.
- def getRNA

  Get an RNA by its name and type.
- def getsRNAlenbyIntid

  Get an sRNA length from an interaction.
- def getAllsRNAlenbyIntid

  Get an sRNA length from an interaction.
- def getsRNAidbyIntid

  Get an sRNAid from an interaction.
- def getAllsRNAidbyIntid

  Get an sRNAid from an interaction.
- def getmRNAlenbyIntid

  Get an mRNA from an interaction.
- def getAllmRNAlenbyIntid

  Get an mRNA from an interaction.

- def getNbInteract

  Count the number of interaction for one software.
- def getInteract

  Get interactions of one software.
- def getScore

  Get the score of an interaction.
- def getAllScore

  Get the score for several interactions.
- def getAllSoft

  Get all the software.
- def getsRNAbyIntid

  Get the name of an sRNA from interaction key.
- def getmRNAbyIntid

  Get the name of an mRNA from interaction key.
- def listit

  Convert fetchall result into list of list.
- def listscore

  Unlist score.
- def getPositionsbyIntid

  Get position for one interaction.
- def getallsRNA

  Get all sRNA.
- def getallsRNAname

  Get an sRNA name and unlist.
- def getIntbysRNAid

  Get the interactid for an sRNA.
- def IndexInteractidOnContact

  Create index on interactid for contact.
- def IndexSrnaidOnInteract

  Create index on srnaid for interact.
- def IndexMrnaidOnInteract

  Create index on mrnaid for interact.
- def createIndexes

  Create index for most use connection.

Public Attributes

- db_path
- db_file
- fastmode
- conn2
- conn
- cur

6.46.1 Detailed Description

Definition at line 12 of file Sqlite_manager.py.

6.46.2 Constructor & Destructor Documentation

6.46.2.1 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::__init__ (*self, result, db_file, fastmode*)

Instanciate Sqlite_manager object.

Parameters

result,:	Path where to write the database
db_file,:	SQlite db file
fastmode,:	fastmode flag

Definition at line 21 of file Sqlite_manager.py.

6.46.3 Member Function Documentation

6.46.3.1 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::commitRetry (*self*)

Retry the commit operation.

Returns

: State of the commit

Definition at line 150 of file Sqlite_manager.py.

Referenced by setContact(), setInteract(), setRNA(), and setSoft().

6.46.3.2 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::connectDB (*self*)

Connect to the database.

Definition at line 44 of file Sqlite_manager.py.

Referenced by createSQLdb().

6.46.3.3 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::createIndexes (*self*)

Create index for most use connection.

Definition at line 527 of file Sqlite_manager.py.

Referenced by getallsRNAname().

6.46.3.4 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::createSQLdb (*self*)

Create the database.

Definition at line 30 of file Sqlite_manager.py.

References conn2, irna::David2tulip::Sqlite_manager::Sqlite_manager::conn2, irna::iRNA_pred::Sqlite_manager::Sqlite_manager::conn2, connectDB(), db_file, irna::David2tulip::Sqlite_manager::Sqlite_manager::db_file, irna::iRNA_pred::Sqlite_manager::Sqlite_manager::db_file, db_path, irna::David2tulip::Sqlite_manager::Sqlite_manager::db_path, and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::db_path.

6.46.3.5 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB (*self*)

Disconnect the database.

Definition at line 59 of file Sqlite_manager.py.

References conn, irna::David2tulip::Sqlite_manager::Sqlite_manager::conn, irna::iRNA_pred::Sqlite_manager::Sqlite_manager::conn, conn2, irna::David2tulip::Sqlite_manager::Sqlite_manager::conn2, irna::iRNA_pred::Sqlite_manager::Sqlite_manager::conn2, disconnectDB2(), irna::David2tulip::Files::Files::fastmode, irna::iRNA_stat::Files::Files::fastmode, irna::iRNA_pred::Files::Files::fastmode, fastmode, irna::David2tulip::Sqlite_manager::Sqlite_manager::fastmode, and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::fastmode.

6.46.3.6 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::disconnectDB2 (*self*)

Disconnect the database and copy on to the disk.

Definition at line 70 of file Sqlite_manager.py.

References cur, irna::David2tulip::Sqlite_manager::Sqlite_manager::cur, irna::iRNA_pred::Sqlite_manager::Sqlite_manager::cur, and setSoft().

Referenced by disconnectDB().

6.46.3.7 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getAllmRNAlenbyIntid (*self, table_interactid*)

Get an mRNA from an interaction.

Parameters

table_interactid,:	table of interaction id

Returns

: List of mRNA length

Definition at line 337 of file Sqlite_manager.py.

References getInteract(), and getScore().

Referenced by getAllsRNAidbyIntid().

6.46.3.8 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallRNA (*self, type_RNA*)

Get all RNA name from one type.

Parameters

type_RNA,:	Type of RNA

Returns

: list of RNA

Definition at line 236 of file Sqlite_manager.py.

References getsRNAlenbyIntid().

Referenced by getidSoftsbyname().

6.46.3.9 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallRNAlength (*self, type_RNA*)

Get all RNA length.

Parameters

type_RNA,:	Type of RNA

Returns

: list of RNA with their length

Definition at line 224 of file Sqlite_manager.py.

References getRNA().

Referenced by getSoftname().

6.46.3.10 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getAllScore (*self, table_interactid*)

Get the score for several interactions.

Parameters

table_interactid,:	list of interaction key

Returns

: List of score

Definition at line 391 of file Sqlite_manager.py.

References getmRNAbyIntid().

Referenced by getNbInteract().

6.46.3.11 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getAllSoft (*self*)

Get all the software.

Returns

: List of software

Definition at line 405 of file Sqlite_manager.py.

References listit(), irna::David2tulip::Sqlite_manager::Sqlite_manager::listit(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::listit(), and listscore().

Referenced by getInteract().

6.46.3.12 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallsRNA (*self*)

Get all sRNA.

Returns

: List of rnaid

Definition at line 470 of file Sqlite_manager.py.

References IndexMrnaidOnInteract(), and IndexSrnaidOnInteract().

Referenced by getmRNAbyIntid().

6.46.3.13 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getAllsRNAidbyIntid (*self, table_interactid*)

Get an sRNAid from an interaction.

Parameters

interactid,:	Interaction id

Returns

: List of sRNAid

Definition at line 306 of file Sqlite_manager.py.

References getAllmRNAlenbyIntid(), getmRNAbyIntid(), irna::iRNA_pred::Sqlite_-manager::Sqlite_manager::getmRNAbyIntid(), and irna::David2tulip::Sqlite_manager::-Sqlite_manager::getmRNAbyIntid().

Referenced by getAllsRNAlenbyIntid().

6.46.3.14 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getAllsRNAlenbyIntid (*self, table_interactid*)

Get an sRNA length from an interaction.

Parameters

table_-interactid,:	table of interaction id

Returns

: list of sRNA length

Definition at line 276 of file Sqlite_manager.py.

References getAllsRNAidbyIntid().

Referenced by getRNA().

6.46.3.15 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getallsRNAname (*self*)

Get an sRNA name and unlist.

Returns

: List of rnaid

Definition at line 481 of file Sqlite_manager.py.

References createIndexes(), IndexInteractidOnContact(), irna::David2tulip::Sqlite-_manager::Sqlite_manager::IndexInteractidOnContact(), irna::iRNA_pred::Sqlite_-manager::Sqlite_manager::IndexInteractidOnContact(), IndexMrnaidOnInteract(), irna-::David2tulip::Sqlite_manager::Sqlite_manager::IndexMrnaidOnInteract(), irna::iRN-A_pred::Sqlite_manager::Sqlite_manager::IndexMrnaidOnInteract(), IndexSrnaidOn-Interact(), irna::David2tulip::Sqlite_manager::Sqlite_manager::IndexSrnaidOnInteract(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::IndexSrnaidOnInteract().

Referenced by listit().

6.46.3.16 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getidSoftsbyname (*self, name*)

Get id of softwares corresponding to one name.

Parameters

name,:	name of a software

Returns

: list of softid

Definition at line 212 of file Sqlite_manager.py.

References getallRNA().

Referenced by getSoft().

6.46.3.17 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getIntbysRNAid (*self, srnaid*)

Get the interactid for an sRNA.

Parameters

srnaid,:	rna key

Returns

: List of interactid

Definition at line 493 of file Sqlite_manager.py.

Referenced by listscore().

6.46.3.18 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getInteract (*self, softid*)

Get interactions of one software.

Parameters

softid,:	soft key

Returns

: List of interactid

Definition at line 367 of file Sqlite_manager.py.

References getAllSoft(), listscore(), irna::David2tulip::Sqlite_manager::Sqlite_manager::listscore(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::listscore().

Referenced by getAllmRNAlenbyIntid().

6.46.3.19 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getmRNAbyIntid (*self, interactid*)

Get the name of an mRNA from interaction key.

Parameters

interactid,:	interaction key

Returns

: name of the mRNA

Definition at line 429 of file Sqlite_manager.py.

References getallsRNA().

Referenced by getAllScore(), and getAllsRNAidbyIntid().

6.46.3.20 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getmRNAlenbyIntid (*self, interactid*)

Get an mRNA from an interaction.

Parameters

interactid,:	Interaction id

Returns

: mRNA length

Definition at line 323 of file Sqlite_manager.py.

References getNbInteract().

Referenced by getsRNAidbyIntid().

6.46.3.21 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getNbInteract (*self, softid*)

Count the number of interaction for one software.

Parameters

softid,:	soft key

Returns

: Number of interaction

Definition at line 354 of file Sqlite_manager.py.

References getAllScore(), listscore(), irna::David2tulip::Sqlite_manager::Sqlite_manager::listscore(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::listscore().

Referenced by getmRNAlenbyIntid().

6.46.3.22 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getPositionsbyIntid (*self, interactid*)

Get position for one interaction.

Parameters

interactid,:	interact key

Returns

: List of position

Definition at line 459 of file Sqlite_manager.py.

References IndexInteractidOnContact().

Referenced by getsRNAbyIntid().

6.46.3.23 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getRNA (*self, name, type_RNA*)

Get an RNA by its name and type.

Parameters

name,:	RNA name
type,:	RNA type

Returns

: A rnaid

Definition at line 250 of file Sqlite_manager.py.

References getAllsRNAlenbyIntid().

Referenced by getallRNAlength().

6.46.3.24 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getScore (*self, interactid*)

Get the score of an interaction.

Parameters

interactid,:	interaction key

Returns

: List of score

Definition at line 379 of file Sqlite_manager.py.

References getsRNAbyIntid().

Referenced by getAllmRNAlenbyIntid().

6.46.3.25 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getSoft (*self, softid*)

Get if software exist by its id.

Parameters

softid,:	Soft key

Returns

: A softid

Definition at line 188 of file Sqlite_manager.py.

References getidSoftsbyname().

Referenced by setContact().

6.46.3.26 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getSoftname (*self, softid*)

Get if software exist by its id.

Parameters

softid,:	Soft key

Returns

: A software name

Definition at line 200 of file Sqlite_manager.py.

References getallRNAlength(), listscore(), irna::David2tulip::Sqlite_manager::-Sqlite_manager::listscore(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager-::listscore().

Referenced by setContact().

6.46.3.27 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getsRNAbyIntid (*self, interactid*)

Get the name of an sRNA from interaction key.

Parameters

interactid,:	interaction key

Returns

: name of the sRNA

Definition at line 417 of file Sqlite_manager.py.

References getPositionsbyIntid().

Referenced by getScore(), and getsRNAlenbyIntid().

6.46.3.28 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getsRNAidbyIntid (*self, interactid*)

Get an sRNAid from an interaction.

Parameters

interactid,:	Interaction id

Definition at line 292 of file Sqlite_manager.py.

References getmRNAlenbyIntid().

Referenced by getsRNAlenbyIntid().

6.46.3.29 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::getsRNAlenbyIntid (*self, interactid*)

Get an sRNA length from an interaction.

Parameters

interactid,:	Interaction id

Returns

: sRNA length

Definition at line 262 of file Sqlite_manager.py.

References getsRNAbyIntid(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::getsRNAbyIntid(), irna::David2tulip::Sqlite_manager::Sqlite_manager::getsRNAbyIntid(), and getsRNAidbyIntid().

Referenced by getallRNA().

6.46.3.30 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::IndexInteractidOnContact (*self*)

Create index on interactid for contact.

Definition at line 503 of file Sqlite_manager.py.

Referenced by getallsRNAname(), and getPositionsbyIntid().

6.46.3.31 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::IndexMrnaidOnInteract (*self*)

Create index on mrnaid for interact.

Definition at line 519 of file Sqlite_manager.py.

Referenced by getallsRNA(), and getallsRNAname().

6.46.3.32 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::IndexSrnaidOnInteract (*self*)

Create index on srnaid for interact.

Definition at line 511 of file Sqlite_manager.py.

Referenced by getallsRNA(), and getallsRNAname().

6.46.3.33 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::listit (*self, t*)

Convert fetchall result into list of list.

Returns

: List of list

Definition at line 440 of file Sqlite_manager.py.

References getallsRNAname().

Referenced by getAllSoft().

6.46.3.34 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::listscore (*self, score*)

Unlist score.

Returns

: List of score

Definition at line 448 of file Sqlite_manager.py.

References getIntbysRNAid(), listscore(), irna::David2tulip::Sqlite_manager::Sqlite_manager::listscore(), and irna::iRNA_pred::Sqlite_manager::Sqlite_manager::listscore().

Referenced by getAllSoft(), getInteract(), getNbInteract(), getSoftname(), and listscore().

6.46.3.35 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setContact (*self, interactid, tab*)

Insert contacts.

Parameters

interactid,:	Interaction key
tab,:	Table of contact

Definition at line 165 of file Sqlite_manager.py.

References commitRetry(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::commitRetry(), irna::David2tulip::Sqlite_manager::Sqlite_manager::commitRetry(), getSoft(), and getSoftname().

Referenced by setInteract().

6.46.3.36 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setInteract (*self, sRNAid, mRNAid, softid*)

Insert interaction.

Parameters

sRNAid,:	sRNA key
mRNAid,:	mRNA key
softid,:	soft key

Returns

: Last insert id

Definition at line 133 of file Sqlite_manager.py.

References commitRetry(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::commitRetry(), irna::David2tulip::Sqlite_manager::Sqlite_manager::commitRetry(), and setContact().

Referenced by setRNA().

6.46.3.37 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setRNA (*self, RNAtab*)

Insert RNA.

Parameters

RNAtab,:	Table of RNA

Definition at line 103 of file Sqlite_manager.py.

References commitRetry(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::commitRetry(), irna::David2tulip::Sqlite_manager::Sqlite_manager::commitRetry(), cur, irna::David2tulip::Sqlite_manager::Sqlite_manager::cur, irna::iRNA_pred::Sqlite_manager::Sqlite_manager::cur, and setInteract().

Referenced by setSoft().

6.46.3.38 def irna::iRNA_stat::Sqlite_manager::Sqlite_manager::setSoft (*self, name*)

Insert soft name.

Parameters

name,:	Soft name

Returns

: Last insert id

Definition at line 86 of file Sqlite_manager.py.

References commitRetry(), irna::iRNA_pred::Sqlite_manager::Sqlite_manager::commitRetry(), irna::David2tulip::Sqlite_manager::Sqlite_manager::commitRetry(), and setRNA().

Referenced by disconnectDB2().

6.46.4 Member Data Documentation

6.46.4.1 irna::iRNA_stat::Sqlite_manager::Sqlite_manager::conn

Definition at line 44 of file Sqlite_manager.py.

Referenced by disconnectDB().

6.46.4.2 irna::iRNA_stat::Sqlite_manager::Sqlite_manager::conn2

Definition at line 44 of file Sqlite_manager.py.

Referenced by createSQLdb(), and disconnectDB().

6.46.4.3 irna::iRNA_stat::Sqlite_manager::Sqlite_manager::cur

Definition at line 44 of file Sqlite_manager.py.

Referenced by disconnectDB2(), and setRNA().

6.46.4.4 irna::iRNA_stat::Sqlite_manager::Sqlite_manager::db_file

Definition at line 21 of file Sqlite_manager.py.

Referenced by createSQLdb().

6.46.4.5 irna::iRNA_stat::Sqlite_manager::Sqlite_manager::db_path

Definition at line 21 of file Sqlite_manager.py.

Referenced by createSQLdb().

6.46.4.6 irna::iRNA_stat::Sqlite_manager::Sqlite_manager::fastmode

Definition at line 21 of file Sqlite_manager.py.

Referenced by disconnectDB().

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Sqlite_manager.py

6.47 irna::iRNA_seq::sRNA::sRNA Class Reference

Public Member Functions

- def __init__

  Instanciate name parser object.
- def readsRNA

  Add sRNA - sRNA edges based on their similarity.

Public Attributes

- sRNA_obj
- srnareg

6.47.1 Detailed Description

Definition at line 9 of file sRNA.py.

6.47.2 Constructor & Destructor Documentation

6.47.2.1 def irna::iRNA_seq::sRNA::sRNA::__init__ (*self*)

Instanciate name parser object.

Definition at line 14 of file sRNA.py.

6.47.3 Member Function Documentation

6.47.3.1 def irna::iRNA_seq::sRNA::sRNA::readsRNA (*self, sRNA_file*)

Add sRNA - sRNA edges based on their similarity.

Parameters

node_objects,:	list of node objects
edge_objects,:	list of edge objects

Definition at line 23 of file sRNA.py.

6.47.4 Member Data Documentation

6.47.4.1 irna::iRNA_seq::sRNA::sRNA::sRNA_obj

Definition at line 23 of file sRNA.py.

6.47.4.2 irna::iRNA_seq::sRNA::sRNA::srnareg

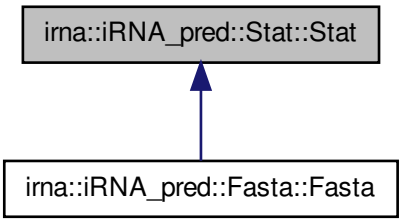
Definition at line 23 of file sRNA.py.

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_seq/sRNA.py

6.48 irna::iRNA_pred::Stat::Stat Class Reference

Inheritance diagram for irna::iRNA_pred::Stat::Stat:



Public Member Functions

- def __init__

  Stat constructor.
- def ComputeGC
- def GetGC

  Get the GC percentage.
- def GetLenSeq

  Get the mean length of sequence.
- def SeqInf

  Write Seq Inf data.
- def openSeqInf

  Open seq_inf file and write header.
- def CloseSeqInf

  Close the Seq Inf file.

Public Attributes

- file

Static Public Attributes

- tuple seqlen = len(seq)

6.48.1 Detailed Description

Definition at line 9 of file Stat.py.

6.48.2 Constructor & Destructor Documentation

6.48.2.1 def irna::iRNA_pred::Stat::Stat::__init__ (*self*)

Stat constructor.

Reimplemented in irna::iRNA_pred::Fasta::Fasta.

Definition at line 15 of file Stat.py.

6.48.3 Member Function Documentation

6.48.3.1 def irna::iRNA_pred::Stat::Stat::CloseSeqInf (*self*)

Close the Seq Inf file.

Definition at line 79 of file Stat.py.

Referenced by openSeqInf().

6.48.3.2 def irna::iRNA_pred::Stat::Stat::ComputeGC (*self, name, seq*)

Definition at line 18 of file Stat.py.

6.48.3.3 def irna::iRNA_pred::Stat::Stat::GetGC (*self*)

Get the GC percentage.

Returns

: The GC percentage

Definition at line 44 of file Stat.py.

References GetLenSeq(), irna::iRNA_pred::RanRNA::RanRNA::NbSeq, and SeqInf().

6.48.3.4 def irna::iRNA_pred::Stat::Stat::GetLenSeq (*self*)

Get the mean length of sequence.

Returns

: Mean length

Definition at line 52 of file Stat.py.

References openSeqInf().

Referenced by GetGC().

6.48.3.5 def irna::iRNA_pred::Stat::Stat::openSeqInf (*self*)

Open seq_inf file and write header.

Definition at line 67 of file Stat.py.

References CloseSeqInf().

Referenced by irna::iRNA_pred::Fasta::Fasta::ExtractFasta(), and GetLenSeq().

6.48.3.6 def irna::iRNA_pred::Stat::Stat::SeqInf (*self, name, seqlen*)

Write Seq Inf data.

Definition at line 59 of file Stat.py.

References file.

Referenced by GetGC().

6.48.4 Member Data Documentation

6.48.4.1 irna::iRNA_pred::Stat::Stat::file

Definition at line 67 of file Stat.py.

Referenced by SeqInf().

6.48.4.2 tuple irna::iRNA_pred::Stat::Stat::seqlen = len(seq) [static]

```
Compute the length and the number of GC
@param name: Name of the sequence
@param seq: RNA sequence
```

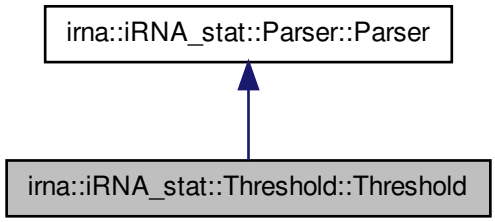
Definition at line 26 of file Stat.py.

The documentation for this class was generated from the following file:

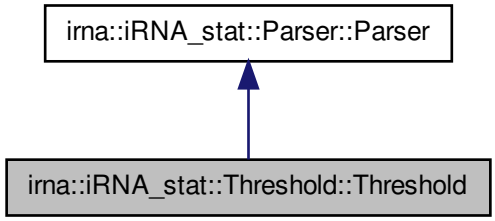
- /home/amine/workspace/iRNA/irna/iRNA_pred/Stat.py

6.49 irna::iRNA_stat::Threshold::Threshold Class Reference

Inheritance diagram for irna::iRNA_stat::Threshold::Threshold:



Collaboration diagram for irna::iRNA_stat::Threshold::Threshold:



Public Member Functions

- def __init__

  Instanciate soft object.
- def getThresinf

  Parse pValue threshold file.
- def getSoftnum

Public Attributes

- soft

- threshold

6.49.1 Detailed Description

Definition at line 10 of file Threshold.py.

6.49.2 Constructor & Destructor Documentation

6.49.2.1 def irna::iRNA_stat::Threshold::Threshold::__init__ (*self, thres_file*)

Instanciate soft object.

Definition at line 16 of file Threshold.py.

References getThresinf().

6.49.3 Member Function Documentation

6.49.3.1 def irna::iRNA_stat::Threshold::Threshold::getSoftnum (*self, soft*)

Parameters

soft,:	Name of asked software

Definition at line 42 of file Threshold.py.

References soft, irna::iRNA_stat::Rand_data::Rand_data::soft, and irna::iRNA_stat::-Execute::Execute::soft.

6.49.3.2 def irna::iRNA_stat::Threshold::Threshold::getThresinf (*self, thres_file*)

Parse pValue threshold file.

Definition at line 24 of file Threshold.py.

Referenced by __init__().

6.49.4 Member Data Documentation

6.49.4.1 irna::iRNA_stat::Threshold::Threshold::soft

Definition at line 24 of file Threshold.py.

Referenced by getSoftnum().

6.49.4.2 irna::iRNA_stat::Threshold::Threshold::threshold

Definition at line 24 of file Threshold.py.

The documentation for this class was generated from the following file:

- /home/amine/workspace/iRNA/irna/iRNA_stat/Threshold.py

Chapter 7

File Documentation

7.1 /home/amine/workspace/iRNA/irna/David2tulip/__init__.py File - Reference

Namespaces

- namespace irna::David2tulip

7.2 /home/amine/workspace/iRNA/irna/iRNA_pred/__init__.py File - Reference

Namespaces

- namespace irna::iRNA_pred

7.3 /home/amine/workspace/iRNA/irna/iRNA_seq/__init__.py File - Reference

Namespaces

- namespace irna::iRNA_seq

7.4 /home/amine/workspace/iRNA/irna/iRNA_stat/__init__.py File - Reference

Namespaces

- namespace irna::iRNA_stat

7.5 /home/amine/workspace/iRNA/irna/David2tulip/David.py File Reference

Classes

- class irna::David2tulip::David::David

Namespaces

- namespace irna::David2tulip::David

7.6 /home/amine/workspace/iRNA/irna/David2tulip/David2tulip.py - File Reference

Namespaces

- namespace irna::David2tulip::David2tulip

Functions

- def irna::David2tulip::David2tulip::main

  Main program ###.

7.7 /home/amine/workspace/iRNA/irna/David2tulip/Davidconfig.py File Reference

Classes

- class irna::David2tulip::Davidconfig::Davidconfig

Namespaces

- namespace irna::David2tulip::Davidconfig

7.8 /home/amine/workspace/iRNA/irna/David2tulip/Edge.py File - Reference

Classes

- class irna::David2tulip::Edge::Edge

  : Handle interaction

Namespaces

- namespace irna::David2tulip::Edge

7.9 /home/amine/workspace/iRNA/irna/David2tulip/Files.py File - Reference

Classes

- class irna::David2tulip::Files::Files

Namespaces

- namespace irna::David2tulip::Files

7.10 /home/amine/workspace/iRNA/irna/iRNA_pred/Files.py File - Reference

Classes

- class irna::iRNA_pred::Files::Files

  :

Namespaces

- namespace irna::iRNA_pred::Files

7.11 /home/amine/workspace/iRNA/irna/iRNA_seq/Files.py File - Reference

Classes

- class irna::iRNA_seq::Files::Files

Namespaces

- namespace irna::iRNA_seq::Files

7.12 /home/amine/workspace/iRNA/irna/iRNA_stat/Files.py File - Reference

Classes

- class irna::iRNA_stat::Files::Files

Namespaces

- namespace irna::iRNA_stat::Files

7.13 /home/amine/workspace/iRNA/irna/David2tulip/Gene_list.py File Reference

Classes

- class irna::David2tulip::Gene_list::Gene_list

  : Handle DAVID enrichment data

Namespaces

- namespace irna::David2tulip::Gene_list

7.14 /home/amine/workspace/iRNA/irna/David2tulip/Graph.py File - Reference

Classes

- class irna::David2tulip::Graph::Graph

Namespaces

- namespace irna::David2tulip::Graph

7.15 /home/amine/workspace/iRNA/irna/David2tulip/Interact.py File Reference

Classes

- class irna::David2tulip::Interact::Interact

Namespaces

- namespace irna::David2tulip::Interact

7.16 /home/amine/workspace/iRNA/irna/David2tulip/Multilist.py - File Reference

Classes

- class irna::David2tulip::Multilist::Multilist

Namespaces

- namespace irna::David2tulip::Multilist

7.17 /home/amine/workspace/iRNA/irna/David2tulip/Mycarn_data.py File Reference

Classes

- class irna::David2tulip::Mycarn_data::Mycarn_data

Namespaces

- namespace irna::David2tulip::Mycarn_data

7.18 /home/amine/workspace/iRNA/irna/David2tulip/Name.py File - Reference

Classes

- class irna::David2tulip::Name::Name

Namespaces

- namespace irna::David2tulip::Name

7.19 /home/amine/workspace/iRNA/irna/David2tulip/Node.py File - Reference

Classes

- class irna::David2tulip::Node::Node
  : Handle RNA information

Namespaces

- namespace irna::David2tulip::Node

7.20 /home/amine/workspace/iRNA/irna/David2tulip/Parser.py File - Reference

Classes

- class irna::David2tulip::Parser::Parser

Namespaces

- namespace irna::David2tulip::Parser

7.21 /home/amine/workspace/iRNA/irna/iRNA_stat/Parser.py File - Reference

Classes

- class irna::iRNA_stat::Parser::Parser

Namespaces

- namespace irna::iRNA_stat::Parser

7.22 /home/amine/workspace/iRNA/irna/David2tulip/pValue.py File Reference

Classes

- class irna::David2tulip::pValue::pValue

Namespaces

- namespace irna::David2tulip::pValue

7.23 /home/amine/workspace/iRNA/irna/iRNA_stat/pValue.py File - Reference

Classes

- class irna::iRNA_stat::pValue::pValue

Namespaces

- namespace irna::iRNA_stat::pValue

7.24 /home/amine/workspace/iRNA/irna/David2tulip/Similarity.py File Reference

Classes

- class irna::David2tulip::Similarity::Similarity

Namespaces

- namespace irna::David2tulip::Similarity

7.25 /home/amine/workspace/iRNA/irna/David2tulip/Sqlite_manager.py File Reference

Classes

- class irna::David2tulip::Sqlite_manager::Sqlite_manager
  : Handle database connection, disconnection and querying.

Namespaces

- namespace irna::David2tulip::Sqlite_manager

7.26 /home/amine/workspace/iRNA/irna/iRNA_pred/Sqlite_manager.py File Reference

Classes

- class irna::iRNA_pred::Sqlite_manager::Sqlite_manager
  : Handle database connection, disconnection and querying.

Namespaces

- namespace irna::iRNA_pred::Sqlite_manager

7.27 /home/amine/workspace/iRNA/irna/iRNA_stat/Sqlite_manager.py File Reference

Classes

- class irna::iRNA_stat::Sqlite_manager::Sqlite_manager

Namespaces

- namespace irna::iRNA_stat::Sqlite_manager

7.28 /home/amine/workspace/iRNA/irna/iRNA_pred/Comparison.py File Reference

Classes

- class irna::iRNA_pred::Comparison::Comparaison
  : Create coupled files and the list of comparison

Namespaces

- namespace irna::iRNA_pred::Comparison

7.29 /home/amine/workspace/iRNA/irna/iRNA_pred/Fasta.py File Reference

Classes

- class irna::iRNA_pred::Fasta::Fasta
  : Write fasta needed for the different software from a multifasta

Namespaces

- namespace irna::iRNA_pred::Fasta

7.30 /home/amine/workspace/iRNA/irna/iRNA_pred/Interaction.py - File Reference

Classes

- class irna::iRNA_pred::Interaction::Interaction
  : Store information on interaction.

Namespaces

- namespace irna::iRNA_pred::Interaction

7.31 /home/amine/workspace/iRNA/irna/iRNA_stat/Interaction.py File Reference

Classes

- class irna::iRNA_stat::Interaction::Interaction

Namespaces

- namespace irna::iRNA_stat::Interaction

7.32 /home/amine/workspace/iRNA/irna/iRNA_pred/iRNA_pred.py - File Reference

Namespaces

- namespace irna::iRNA_pred::iRNA_pred

Functions

- def irna::iRNA_pred::iRNA_pred::WriteAllExecTime

  Write execution time.
- def irna::iRNA_pred::iRNA_pred::saveData

  Save data in a sqlite database.
- def irna::iRNA_pred::iRNA_pred::main

  : Main program

7.33 /home/amine/workspace/iRNA/irna/iRNA_pred/Merger.py File - Reference

Classes

- class irna::iRNA_pred::Merger::Merger

  Merge the xml files in a sqlite database.

Namespaces

- namespace irna::iRNA_pred::Merger

7.34 /home/amine/workspace/iRNA/irna/iRNA_pred/Mpi.py File - Reference

Classes

- class irna::iRNA_pred::Mpi::Mpi

  : Manage Mpi run

Namespaces

- namespace irna::iRNA_pred::Mpi

7.35 /home/amine/workspace/iRNA/irna/iRNA_stat/Mpi.py File - Reference

Classes

- class irna::iRNA_stat::Mpi::Mpi
  : Manage Mpi run

Namespaces

- namespace irna::iRNA_stat::Mpi

7.36 /home/amine/workspace/iRNA/irna/iRNA_pred/Parse.py File - Reference

Classes

- class irna::iRNA_pred::Parse::Parse
  : Parse data from the different software.

Namespaces

- namespace irna::iRNA_pred::Parse

7.37 /home/amine/workspace/iRNA/irna/iRNA_pred/RanRNA.py - File Reference

Classes

- class irna::iRNA_pred::RanRNA::RanRNA

Namespaces

- namespace irna::iRNA_pred::RanRNA

Variables

- tuple irna::iRNA_pred::RanRNA::generator = RanRNA(0.41728640,141,100,"/home/amine/workspace/-Mycarn_old/data/test/")

7.38 /home/amine/workspace/iRNA/irna/iRNA_pred/Stat.py File - Reference

Classes

- class irna::iRNA_pred::Stat::Stat

Namespaces

- namespace irna::iRNA_pred::Stat

7.39 /home/amine/workspace/iRNA/irna/iRNA_seq/Genbank.py File Reference

Classes

- class irna::iRNA_seq::Genbank::Genbank

Namespaces

- namespace irna::iRNA_seq::Genbank

7.40 /home/amine/workspace/iRNA/irna/iRNA_seq/iRNA_seq.py - File Reference

Namespaces

- namespace irna::iRNA_seq::iRNA_seq

Functions

- def irna::iRNA_seq::iRNA_seq::main

  Main program function.

7.41 /home/amine/workspace/iRNA/irna/iRNA_seq/Sequences.py File Reference

Classes

- class irna::iRNA_seq::Sequences::Sequences

Namespaces

- namespace irna::iRNA_seq::Sequences

7.42 /home/amine/workspace/iRNA/irna/iRNA_seq/sRNA.py File - Reference

Classes

- class irna::iRNA_seq::sRNA::sRNA

Namespaces

- namespace irna::iRNA_seq::sRNA

7.43 /home/amine/workspace/iRNA/irna/iRNA_stat/Analysis.py File Reference

Classes

- class irna::iRNA_stat::Analysis::Analysis

Namespaces

- namespace irna::iRNA_stat::Analysis

7.44 /home/amine/workspace/iRNA/irna/iRNA_stat/Communication.py File Reference

Classes

- class irna::iRNA_stat::Communication::Communication
  : Empty object used for mpi communication

Namespaces

- namespace irna::iRNA_stat::Communication

7.45 /home/amine/workspace/iRNA/irna/iRNA_stat/Computer.py - File Reference

Classes

- class irna::iRNA_stat::Computer::Computer

Namespaces

- namespace irna::iRNA_stat::Computer

7.46 /home/amine/workspace/iRNA/irna/iRNA_stat/Draw_data.py - File Reference

Classes

- class irna::iRNA_stat::Draw_data::draw_data

Namespaces

- namespace irna::iRNA_stat::Draw_data

Variables

- tuple irna::iRNA_stat::Draw_data::graphics = importr('graphics')
- tuple irna::iRNA_stat::Draw_data::grdevices = importr('grDevices')
- tuple irna::iRNA_stat::Draw_data::base = importr('base')
- tuple irna::iRNA_stat::Draw_data::stats = importr('stats')
- tuple irna::iRNA_stat::Draw_data::pROC = importr('pROC')
- tuple irna::iRNA_stat::Draw_data::Cairo = importr('Cairo')

7.47 /home/amine/workspace/iRNA/irna/iRNA_stat/Ecdf.py File - Reference

Classes

- class irna::iRNA_stat::Ecdf::Ecdf

Namespaces

- namespace irna::iRNA_stat::Ecdf

7.48 /home/amine/workspace/iRNA/irna/iRNA_stat/Execute.py File Reference

Classes

- class irna::iRNA_stat::Execute::Execute

Namespaces

- namespace irna::iRNA_stat::Execute

7.49 /home/amine/workspace/iRNA/irna/iRNA_stat/Exp_data.py File Reference

Classes

- class irna::iRNA_stat::Exp_data::Exp_data

Namespaces

- namespace irna::iRNA_stat::Exp_data

7.50 /home/amine/workspace/iRNA/irna/iRNA_stat/iRNA_stat.py - File Reference

Namespaces

- namespace irna::iRNA_stat::iRNA_stat

Functions

- def irna::iRNA_stat::iRNA_stat::usage

  Test correct usage of arguments.
- def irna::iRNA_stat::iRNA_stat::main

  Determine les fichiers fournis en arguments def getArgument(): """ Determine the argument.

7.51 /home/amine/workspace/iRNA/irna/iRNA_stat/NormScore.py - File Reference

Classes

- class irna::iRNA_stat::NormScore::NormScore

Namespaces

- namespace irna::iRNA_stat::NormScore

7.52 /home/amine/workspace/iRNA/irna/iRNA_stat/Pickling.py File Reference

Classes

- class irna::iRNA_stat::Pickling::Pickling

Namespaces

- namespace irna::iRNA_stat::Pickling

7.53 /home/amine/workspace/iRNA/irna/iRNA_stat/pValue_selection.py File Reference

Classes

- class irna::iRNA_stat::pValue_selection::pValue_selection

Namespaces

- namespace irna::iRNA_stat::pValue_selection

7.54 /home/amine/workspace/iRNA/irna/iRNA_stat/Rand_data.py File Reference

Classes

- class irna::iRNA_stat::Rand_data::Rand_data

Namespaces

- namespace irna::iRNA_stat::Rand_data

7.55 /home/amine/workspace/iRNA/irna/iRNA_stat/Regression.py - File Reference

Classes

- class irna::iRNA_stat::Regression::Regression

Namespaces

- namespace irna::iRNA_stat::Regression

7.56 /home/amine/workspace/iRNA/irna/iRNA_stat/Soft.py File - Reference

Classes

- class irna::iRNA_stat::Soft::Soft

Namespaces

- namespace irna::iRNA_stat::Soft

7.57 /home/amine/workspace/iRNA/irna/iRNA_stat/Threshold.py - File Reference

Classes

- class irna::iRNA_stat::Threshold::Threshold

Namespaces

- namespace irna::iRNA_stat::Threshold