

## Probabilistic StarVars

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# Chapter 1

## Namespace Index

### 1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

<a href="#">main</a> . . . . .	7
<a href="#">oriented_point</a> . . . . .	7
<a href="#">starvars</a> . . . . .	8



## Chapter 2

# Class Index

### 2.1 Class List

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

<a href="#">oriented_point.OrientedPoint</a> . . . . .	9
<a href="#">starvars.StarVars</a> . . . . .	10





## Chapter 3

# File Index

### 3.1 File List

Here is a list of all files with brief descriptions:

<a href="#">main.py</a>	15
<a href="#">oriented_point.py</a>	15
<a href="#">starvars.py</a>	16



## Chapter 4

# Namespace Documentation

### 4.1 main Namespace Reference

#### Functions

- def [main](#)

#### Variables

- string [\\_\\_author\\_\\_](#) = "Danilo H. Perico"
- string [\\_\\_license\\_\\_](#) = "GNU General Public License v3.0"
- string [\\_\\_project\\_\\_](#) = "Probabilistic [StarVars](#)"

#### 4.1.1 Function Documentation

4.1.1.1 `def main.main ( )`

#### 4.1.2 Variable Documentation

4.1.2.1 `string main.__author__ = "Danilo H. Perico"`

4.1.2.2 `string main.__license__ = "GNU General Public License v3.0"`

4.1.2.3 `string main.__project__ = "Probabilistic StarVars"`

### 4.2 oriented\_point Namespace Reference

#### Classes

- class [OrientedPoint](#)

#### Variables

- string [\\_\\_author\\_\\_](#) = "Danilo H. Perico"
- string [\\_\\_license\\_\\_](#) = "GNU General Public License v3.0"
- string [\\_\\_project\\_\\_](#) = "Probabilistic StarVars"

### 4.2.1 Variable Documentation

4.2.1.1 string oriented\_point.\_\_author\_\_ = "Danilo H. Perico"

4.2.1.2 string oriented\_point.\_\_license\_\_ = "GNU General Public License v3.0"

4.2.1.3 string oriented\_point.\_\_project\_\_ = "Probabilistic StarVars"

## 4.3 starvars Namespace Reference

### Classes

- class [StarVars](#)

### Variables

- string [\\_\\_author\\_\\_](#) = "Danilo H. Perico"
- string [\\_\\_license\\_\\_](#) = "GNU General Public License v3.0"
- string [\\_\\_project\\_\\_](#) = "Probabilistic [StarVars](#)"

### 4.3.1 Variable Documentation

4.3.1.1 string starvars.\_\_author\_\_ = "Danilo H. Perico"

4.3.1.2 string starvars.\_\_license\_\_ = "GNU General Public License v3.0"

4.3.1.3 string starvars.\_\_project\_\_ = "Probabilistic StarVars"

## Chapter 5

# Class Documentation

### 5.1 oriented\_point.OrientedPoint Class Reference

Collaboration diagram for oriented\_point.OrientedPoint:

oriented_point.OrientedPoint
+ x + y + orientation + forward_noise + turn_noise + sense_noise
+ __init__()

#### Public Member Functions

- `def \_\_init\_\_`

#### Public Attributes

- `x`
- `y`
- `orientation`
- `forward\_noise`
- `turn\_noise`
- `sense\_noise`

#### 5.1.1 Constructor & Destructor Documentation

5.1.1.1 `def oriented_point.OrientedPoint.__init__( self )`

### 5.1.2 Member Data Documentation

5.1.2.1 `oriented_point.OrientedPoint.forward_noise`

5.1.2.2 `oriented_point.OrientedPoint.orientation`

5.1.2.3 `oriented_point.OrientedPoint.sense_noise`

5.1.2.4 `oriented_point.OrientedPoint.turn_noise`

5.1.2.5 `oriented_point.OrientedPoint.x`

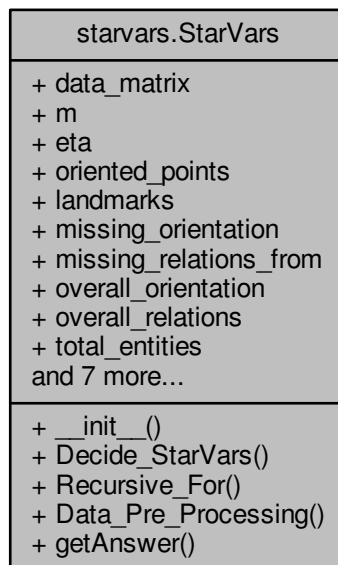
5.1.2.6 `oriented_point.OrientedPoint.y`

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

- [oriented\\_point.py](#)

## 5.2 starvars.StarVars Class Reference

Collaboration diagram for starvars.StarVars:



### Public Member Functions

- def [\\_\\_init\\_\\_](#)
- def [Decide\\_StarVars](#)
- def [Recursive\\_For](#)
- def [Data\\_Pre\\_Processing](#)
- def [getAnswer](#)

## Public Attributes

- [data\\_matrix](#)
- [m](#)
- [eta](#)
- [oriented\\_points](#)
- [landmarks](#)
- [missing\\_orientation](#)
- [missing\\_relations\\_from](#)
- [overall\\_orientation](#)
- [overall\\_relations](#)
- [total\\_entities](#)
- [loopnum](#)
- [variable\\_list](#)
- [orient\\_index](#)
- [relations\\_index](#)
- [xy\\_answer](#)
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### 5.2.1 Constructor & Destructor Documentation

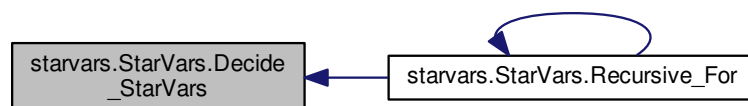
5.2.1.1 `def starvars.StarVars.__init__( self )`

### 5.2.2 Member Function Documentation

5.2.2.1 `def starvars.StarVars.Data_Pre_Processing ( self )`

5.2.2.2 `def starvars.StarVars.Decide_StarVars ( self, variable_list )`

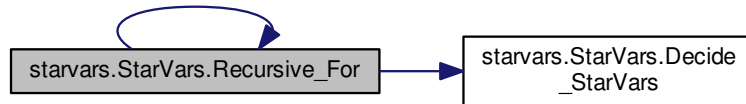
Here is the caller graph for this function:



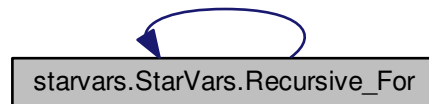
5.2.2.3 `def starvars.StarVars.getAnswer ( self )`

#### 5.2.2.4 `def starvars.StarVars.Recursive_For ( self, variable_list, n )`

Here is the call graph for this function:



Here is the caller graph for this function:



### 5.2.3 Member Data Documentation

#### 5.2.3.1 `starvars.StarVars.data_matrix`

splitting received string

converting data to numpy matrix

#### 5.2.3.2 `starvars.StarVars.eta`

#### 5.2.3.3 `starvars.StarVars.landmarks`

get landmarks ###

#### 5.2.3.4 `starvars.StarVars.loopnum`

#### 5.2.3.5 `starvars.StarVars.m`

#### 5.2.3.6 `starvars.StarVars.missing_orientation`

get missing orientations ###

#### 5.2.3.7 `starvars.StarVars.missing_relations_from`

get missing relations ###



5.2.3.8 starvars.StarVars.orient\_index

5.2.3.9 starvars.StarVars.oriented\_points

get oriented points ###

5.2.3.10 starvars.StarVars.overall\_orientation

5.2.3.11 starvars.StarVars.overall\_orientation\_answer

5.2.3.12 starvars.StarVars.overall\_relations

5.2.3.13 starvars.StarVars.overall\_relations\_answer

5.2.3.14 starvars.StarVars.relations\_index

5.2.3.15 starvars.StarVars.total\_entities

5.2.3.16 starvars.StarVars.variable\_list

5.2.3.17 starvars.StarVars.xy\_answer

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

- [starvars.py](#)



## Chapter 6

# File Documentation

### 6.1 main.py File Reference

#### Namespaces

- `main`

#### Functions

- `def main.main`

#### Variables

- string `main.__author__` = "Danilo H. Perico"
- string `main.__license__` = "GNU General Public License v3.0"
- string `main.__project__` = "Probabilistic StarVars"

### 6.2 oriented\_point.py File Reference

#### Classes

- class `oriented_point.OrientedPoint`

#### Namespaces

- `oriented_point`

#### Variables

- string `oriented_point.__author__` = "Danilo H. Perico"
- string `oriented_point.__license__` = "GNU General Public License v3.0"
- string `oriented_point.__project__` = "Probabilistic StarVars"

## 6.3 starvars.py File Reference

### Classes

- class [starvars.StarVars](#)

### Namespaces

- [starvars](#)

### Variables

- string [starvars.\\_\\_author\\_\\_](#) = "Danilo H. Perico"
- string [starvars.\\_\\_license\\_\\_](#) = "GNU General Public License v3.0"
- string [starvars.\\_\\_project\\_\\_](#) = "Probabilistic StarVars"

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