

Mongoose

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Chapter 1

Class Index

1.1 Class List

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

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Chapter 2

Class Documentation

2.1 Mongoose::cs_dmperm_results Struct Reference

Public Attributes

- `csi * p`
- `csi * q`
- `csi * r`
- `csi * s`
- `csi nb`
- `csi rr [5]`
- `csi cc [5]`

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

- `/Users/scott/Documents/Research/Mongoose/Include/mongoose_cs.hpp`

2.2 Mongoose::cs_sparse Struct Reference

Public Attributes

- `csi nzmax`
- `csi m`
- `csi n`
- `csi * p`
- `csi * i`
- `double * x`
- `csi nz`

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

- `/Users/scott/Documents/Research/Mongoose/Include/mongoose_cs.hpp`

2.3 Mongoose::CutCost Struct Reference

Public Attributes

- Weight **heuCost**
- Weight **cutCost**
- Weight **W** [2]
- Weight **imbalance**

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

- /Users/scott/Documents/Research/Mongoose/Include/mongoose_cutcost.hpp

2.4 Mongoose::Graph Class Reference

Static Public Member Functions

- static [Graph](#) * **Create** (const Int _n, const Int _nz)
- static [Graph](#) * **Create** ([Graph](#) * _parent)

Public Attributes

- Int [cs_n](#)
- Int **cs_m**
- Int **cs_nz**
- Int **cs_nzmax**
- Int [n](#)
- Int **nz**
- Int * **p**
- Int * **i**
- Weight * **x**
- Weight * **w**
- Weight **X**
- Weight **W**
- Weight **H**
- bool * [partition](#)
- Weight * **vertexGains**
- Int * **externalDegree**
- Int * **bhIndex**
- Int * **bhHeap** [2]
- Int **bhSize** [2]
- Weight [heuCost](#)
- Weight **cutCost**
- Weight **W0**
- Weight **W1**
- Weight **imbalance**
- [Graph](#) * [parent](#)
- Int **clevel**
- Int **cn**
- Int * **matching**
- Int * **matchmap**
- Int * **invmatchmap**
- Int * **matchtype**
- Int * [mark](#)
- Int **markValue**

2.4.1 Member Data Documentation

2.4.1.1 Int Mongoose::Graph::cs_n

CSparse3 Interoperability

2.4.1.2 Weight Mongoose::Graph::heuCost

Cut Cost Metrics

2.4.1.3 Int* Mongoose::Graph::mark

Mark Data

2.4.1.4 Int Mongoose::Graph::n

[Graph](#) Data

2.4.1.5 Graph* Mongoose::Graph::parent

Matching Data

2.4.1.6 bool* Mongoose::Graph::partition

Partition Data

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

- `/Users/scott/Documents/Research/Mongoose/Include/mongoose_graph.hpp`

2.5 Mongoose::Options Struct Reference

Static Public Member Functions

- static [Options](#) * **Create** ()

Public Attributes

- Int **randomSeed**
- Int [coarsenLimit](#)
- MatchingStrategy **matchingStrategy**
- bool **doCommunityMatching**
- Weight **davisBrotherlyThreshold**
- GuessCutType [guessCutType](#)
- Int **guessSearchDepth**
- Int [numDances](#)
- bool **useFM**
- Int **fmSearchDepth**
- Int **fmConsiderCount**
- Int **fmMaxNumRefinements**
- bool **useQPGradProj**
- bool **useQPBallOpt**
- Weight **gradprojTol**
- Int **gradprojIterationLimit**
- Weight [targetSplit](#)
- Weight **tolerance**
- bool [doExpensiveChecks](#)

2.5.1 Member Data Documentation

2.5.1.1 Int Mongoose::Options::coarsenLimit

Coarsening [Options](#)

2.5.1.2 bool Mongoose::Options::doExpensiveChecks

Debug [Options](#)

2.5.1.3 GuessCutType Mongoose::Options::guessCutType

Guess Partitioning [Options](#)

2.5.1.4 Int Mongoose::Options::numDances

Waterdance [Options](#)

2.5.1.5 Weight Mongoose::Options::targetSplit

Final Partition Target Metrics

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

- /Users/scott/Documents/Research/Mongoose/Include/mongoose_options.hpp

2.6 Mongoose::QPDelta Class Reference

Static Public Member Functions

- static [QPDelta](#) * **Create** (Int n)

Public Attributes

- Double * **x**
- Int **nf**
- Int * **ix**
- Int * **LinkUp**
- Int * **LinkDn**
- Double * **g**
- Double * **D**
- Int * **wi** [2]
- Double * **wx** [3]
- Int **its**
- Double **err**
- Int **ib**
- Double **b**

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

- /Users/scott/Documents/Research/Mongoose/Include/mongoose_qpdelta.hpp

2.7 Mongoose::SwapCandidate Struct Reference

Public Attributes

- Int **vertex**
- bool **partition**
- Weight **nodeWeight**
- Weight **gain**
- Weight **heuCost**
- Int **bhPosition**
- Weight **imbalance**

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

- /Users/scott/Documents/Research/Mongoose/Include/mongoose_fiducciamattheyses.hpp

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