Research notebook

The purpose of this page is to be a sort of research notebook. I have also created a project at OSF (Open Science Frameworks) site having similar purpose in mind (and to investigate the facilities provided by OSF). Project page Computational Engineering Notebook

Questions

- Questions

Quotes

- Quotes

Nomenclature, glossaries, terminology, dictionaries

- Finite Element Modeling and Analysis Glossary
- http://www.geol.lsu.edu/Faculty/Juan/downloads/literature/cmsc30_03.pdf

Software at Academia

- Academic software

Science

- http://cseweb.ucsd.edu/~ricko/CSE3/Lie_with_Statistics.pdf

Engineering vs Sicence

- Software Engineering, Not Computer Science
  http://www.stevemcconnell.com/psd/04-senotcs.htm
- Scientists and software engineers: a tale of two cultures
  http://www.ppig.org/papers/20th-segal.pdf

Reproducible numerical science

- http://www.ahay.org/wiki/Main_Page Madagaskar
- http://pypet.readthedocs.org/en/latest/index.html pypet
- http://wiki.stodden.net/ICERM_Reproducibility_in_Computational_and_Experimental_Mathematics:_Readings_and_References
- http://www.reproduciblescience.org/index.php/Main_Page
- http://www.taverna.org.uk/ Taverna
- http://www.vistrails.org/index.php/Main_Page Vistrails

- http://www.activepapers.org/

Books and papers

- Books
- Computational Algebra

Geometric Algebra & Geometric Calculus

- Linear and Geometric Algebra
- C++ template classes for geometric algebra

Math

- Mathematical tools
- Method of manufactured solution
- Frenet frame
- Convolution
- Oridinary differential equations

Mesh generation & geometric modeling

- http://www.steptools.com/support/stdev_docs/stpfiles/ap203/
- http://www.cc.gatech.edu/projects/large_models/
- http://gts.sourceforge.net/samples.html
- http://www.aimatshape.net/ontologies/shapes/viewmodels.jsp

Adaptive Hierarchical Mesh Refinement

- There is separate page where I collect references to this topic.

Circle packing

- https://www.nodebox.net/code/index.php/shared_2008-08-07-12-55-33

Materials Modeling

- There is separate notebook where I collect references to material modeling libraries, papers, etc.

Programming

- DSL for FEM
- C++ programming
- C programming
- Matlab programming
- Octave programming
- C/C++ libraries
- Qt programming
- JavaScript programming

Tex and LaTeX and DocOnce

LaTeX

- TeX and LaTeX
- https://khan.github.io/KaTeX/

DocOnce

- https://github.com/hplgit/doconce
- http://hplgit.github.io/doconce/doc/pub/tutorial/tutorial.html

Tips and tricks

- Setting HDF5 API version
- PDF tricks
- Environment setup
- Bash tricks
- Documenting with Sphinx
- General programming tips

Tools

- Images manipulation
- HDF5
- CMake
- Scientific Data Management Systems
- Installers on Windows
- SVG
- BRLCAD
- Maxima
- Unicode
- https://fcmlab.cie.bgu.tum.de/redmine/projects/fcmlab/wiki/FCMLab
- IGA

Vim

- Better whitespace hightlighting plugin