

Thomas Reid Acheson, PhD

Email: reid.atcheson@gmail.com
Website: <http://www.reidatcheson.com>
Phone: (770) 633-5292

Education

Kennesaw State University, Kennesaw, GA
Bachelor of Science, Mathematics, May 2010

Rice University, Houston, TX
Master of Arts, Computational and Applied Mathematics, May 2013

Rice University, Houston, TX
Doctor of Philosophy, Computational and Applied Mathematics, May 2015

Experience

Accelerator Software Engineer	Numerical Algorithms Group Houston, TX	January 2016 - Current
Work with clients to develop accelerator solutions.		
Senior Research Geophysicist	Open Geophysical Houston, TX	May 2015 - December 2015
Research and implement workflows using C++ and Java to productively work with large seismic datasets.		
Intern	Z-Terra Houston, TX	Summer 2014
Numerical algorithm research and development in C for seismic imaging applications.		
Teaching Assistant	Rice University	Spring 2013
Led a recitation section on undergraduate matrix analysis (CAAM 335), and held weekly office hours.		

Computer Skills

Proficient in programming C,C++,Julia,Haskell along with associated workflow tools such as Make and Git. Experienced with CUDA and OpenCL for GPU acceleration of numerical codes, as well as MPI for coding on a cluster. Experienced Unix and Mac user.

Notable Speaking Events

GPU Accelerated Plane-Wave Discontinuous Galerkin Methods PhD thesis defense, 2015.

Julia: A High Performance Replacement for MATLAB CAAM Graduate Seminar, 2014.

Rapidly Iterating from Prototype to Near-C Performance in Julia JuliaCon 2014, Chicago, IL <http://juliacon.org/>.

Parallel Trefftz Discontinuous Galerkin Methods on Graphics Processing Units PhD Proposal, April 2014.

Explicit Discontinuous Galerkin Methods for Linear Hyperbolic Problems Master's Defense.

Challenging Conventional Wisdom on Time-Stepping CAAM Graduate Seminar, 2012.

Dealing With Artificial Stiffness in Spectral Methods CAAM Graduate Seminar, 2010.