

Education

University of Chicago

BS in Computer Science and BS in Mathematics GPA 3.5

Chicago, IL

June 2013

- Notable Courses: Topics in Operating Systems, Database Systems, Advanced Distributed Systems, Functional Programming, Graph Theory, Formal Languages, Algebraic Number Theory, Abstract Algebra, Discrete Mathematics, Analysis in \mathbb{R}^n

Publications

Data-Only Flattening for Nested Data Parallelism

L. Bergstrom, J. Reppy, S. Rosen, A. Shaw, M. Rainey, M. Fluet

Manticore Project, University of Chicago

PPoPP 2013

- Generalized parallel segmented sums into segmented reductions, optimized segmented reduce

Status Report: The Manticore Project (2012)

C. Berger, L. Bergstrom, J. Reppy, S. Rosen, N. Sandler, A. Shaw, M. Rainey, M. Fluet

Manticore Project, University of Chicago

Work Experience

Globus

SaaS Backend Engineer

Computation Institute, University of Chicago; Argonne National Lab

July 2013 – Present

- Used and developed Chef cookbooks to maintain servers backing the Globus service
- Managed the coordinated deployment of code from multiple development teams onto QA and production servers
- Refined the build and deployment processes using Git, Jenkins CI, AWS S3, and AWS EC2

Manticore Project

Contributor

John Reppy, University of Chicago

June 2011 – June 2013

- Adapted thread scheduling to prioritize non-IO bound computations
- Developed a target for full or partial flattening on arbitrarily nested arrays and tuples as a Nested Flat Array

Computer Science Instructional Laboratories

System Administrator

University of Chicago

May 2010 – June 2013

- Administered Mac OS X servers, Ubuntu servers, VMWare ESXi servers, and Mac OS X workstations
- Modified and used tools including radmin, Nagios, Fabric, Parallels, and VMWare
- Designed and implemented a centralized administration and configuration management service

Computer Science Department

TA, Grader

University of Chicago

January 2012 – June 2013

- Networks and Distributed Systems (Winter 2012, Spring 2013), Computer Science with Applications I (Autumn 2012), Honors Introduction to Computer Science II (Winter 2013)

Skills & Experience

- **Programing & Scripting Languages:** Python, C, SML, Bash, SQL, Ruby, Java, awk, make, flex/bison, AppleScript, x86 Assembly, C++, LISP, Haskell, Go, R, Lua, PHP, JavaScript, MATLAB, XSLT
- **Data Serialization, Templating, & Storage Languages:** JSON, XML, jinja, mustache, ERB, CSS, Liquid
- **Open Source Work:** SALVE (<http://salve.sirosen.net/>), Manticore (manticore.cs.uchicago.edu)
- **Tools:** L^AT_EX, vim, SSH, git, svn, AWS CLI, cron, logrotate, nginx, Chef, Jenkins, nagios
- **System Administration Platforms & Operating Systems:** AWS, Mac OS X, Ubuntu, Debian, CentOS, RedHat, VMWare (ESXi)