

Work Experience

Globus

SaaS Backend Engineer

Computation Institute, University of Chicago; Argonne National Lab

July 2013 – Present

- Developed Chef cookbooks, bash scripts, and python scripts to maintain Globus servers
- Managed the deployment of code from multiple teams onto QA and production servers, including Build and Release Engineering and Workflow Automation

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

Open Source Work

SALVE

salve.sirosen.net

Manticore

manticore.cs.uchicago.edu

Programming & Scripting Languages & Formats

Python, C, SML, Bash, SQL, Ruby, Java, awk, (GNU) make, ooc, JavaScript (& jQuery), flex/bison, AppleScript, x86 Assembly, C++, LISP, Haskell, Go, R, Lua, PHP, XSLT, JSON, XML, mustache, ERB, CSS, Liquid, jinja

Tools & Software

nginx, Chef, Jenkins, Travis CI, nagios, OSSEC, Vagrant, JIRA, Sentry (getsentry.com), Elasticsearch, Postgres, rsyslog

Platforms & Operating Systems

AWS, Mac OS X, Ubuntu, Debian, CentOS, RedHat, VMWare (ESXi), SUSE, ArchLinux

Education

University of Chicago

BS in Computer Science and BS in Mathematics

GPA 3.5

June 2013

Notable Courses: Topics in Operating Systems, Advanced Distributed Systems, Formal Languages, Algebraic Number Theory

Publications

Data-Only Flattening for Nested Data Parallelism

Manticore Project, University of Chicago

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

PPoPP 2013

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

Status Report: The Manticore Project (2012)

Manticore Project, University of Chicago

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