

## 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](http://salve.sirosen.net)

Manticore

[manticore.cs.uchicago.edu](http://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](http://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*