# 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 radmind, 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