James J Porter

web: jamesporter.me
mail: james@jamesporter.me

Experience

- **Software Engineer**, November 2014 - November 2015

  University of Chicago Center for Data Intensive Science, Genomic Data Commons Team — Chicago, Illinois

  - Migrated almost 2 PB of genomic data from legacy storage systems into new S3-compatible storage.
  - Imported and harmonized metadata from poorly organized legacy systems into PostgreSQL / Elasticsearch.
  - Developed HTTP APIs and backend services for accessing genomic data and metadata, primarily using Python.
  - Developed and maintained configuration for operational aspects of the system, including deployment, service discovery, etc., using Saltstack and Consul.

- **Software Engineering Intern**, July 2014 - October 2014

  Stripe — San Francisco, California

  - Developed internal tooling for large scale correctness and performance testing of financial operations code, primarily using Ruby.
  - Refactored legacy code to improve testability.

- **Student Research Programmer**, Spetember 2013 - June 2014

  University of Chicago Center for Data Intensive Science — Chicago, Illinois

  - Developed, deployed, and improved software infrastructure for doing bioinformatic analyses on cloud computing systems, primarily using Python.
  - Refactored and improved reliability of subsystem for automated HPC cluster provisioning.
  - Contributed to widely used open source projects including bcbio-nextgen and IPython.

- **Recurse Center**, June - August 2013

  New York, NY

  recurse.com

  - Attended a "free, self-directed, educational retreat for people who want to get better at programming, whether they've been coding for three decades or three months".
  - Contributed to the Julia programming language.
  - Wrote virtualenvwrapper.el to improve the experience of Python development in Emacs.
  - Taught myself web programming (CSS/HTML/Javascript, Flask), Julia, and some Clojure.

Education

- **The University of Chicago** — Chicago, Illinois

  Biological Sciences, Minor in Computer Science, 2014, GPA 3.98/4.0

Skills

- Experienced user and programmer of UNIX systems and associated tools.

- *Languages*: Python, Ruby, C, Javascript, HTML/CSS, Julia, Lisp(s), Bash scripting, dabbler in various others

- *Datastores*: familiar with usage and basic operation of PostgreSQL and Elasticsearch, some familiarity with MongoDB and Neo4J

- *Tools*: Git, Github, Travis CI, Openstack, automated configuration management (Saltstack), Consul, familiar with basic setup and configuration of typical Linux server components (webservers, process supervisors, logrotate, etc.), as well as typical packaging and deployment tools for Python (and to a lesser degree Ruby, Javascript)

Miscellaneous

- One of the primary organizers of JuliaCon 2014, which took place in Chicago and was the first conference on the Julia programming language.