James J Porter

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Experience

• Software Engineering Intern, 2014

Stripe — San Francisco, California

- Developed internal tooling for correctness and performance testing of financial operations pipeline.
- Software Developer, 2013-2014

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 dramatically improved reliability of subsystem for automated HPC cluster provisioning.
- Contributed to widely used open source projects including bcbio-nextgen and IPython.
- Core Tutor, 2013-2014

University of Chicago Department of Computer Science — Chicago, Illinois

- Tutored introductory computer science students in Racket, Java, Haskell, and Python.
- Hacker School, 2013

New York City, NY

hackerschool.com

- "a writer's retreat for programmers."
- Studied new programming languages, fields, techniques, etc.
- Contributed to a variety of open source projects.
- Laboratory Teaching Assistant, 2012-2013

University of Chicago Biological Sciences Division — Chicago, Illinois

- Instructed first-year students in experimental and computational molecular biology lab techniques.
- Managed a teaching laboratory of 14-20 students for four hours each week.
- Taught scientific programming with Matlab, taking students from zero knowledge to implementing models of genetic switches.
- Undergraduate Research, 2011-2013

Ilaria Rebay Lab, University of Chicago Ben May Department for Cancer Research — Chicago, Illinois

- Designed, implemented, and optimized simulations of genetic systems.
- Performed experiments aimed at understanding mechanisms of transcriptional repression in fruit flies.
- Facilitated collaboration between three research groups at two universities.

Education

 The University of Chicago — Chicago, Illinois Biological Sciences, Minor in Computer Science, 2014 GPA 3.98/4.0

 Chardon High School — Chardon, Ohio 2010
GPA 4.0/4.0

Skills

Computational

- Experience using and programming UNIX systems and associated tools.
- Competent user of (in approximate order of familiarity) Python, Ruby, Julia, C, Javascript, Lisp(s), shell scripting, Git, HTML/CSS, Matlab, Mathematica, various others.
- Comfortable programing in a wide variety of domains and styles.

Laboratory

- Molecular biology (cloning, PCR, etc.)
- Microinjections
- Confocal fluorescence microscopy
- Care and breeding of *Drosophila melanogaster*

Miscellaneous

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

Honors and Awards

- Phi Beta Kappa Society, 2013
- Barry M. Goldwater Scholarship, 2013
- BSCD Fellowship, University of Chicago Biological Sciences Division, 2012
- Research Experiences for Undergraduates Fellowship, Chicago Center for Systems Biology, 2011
- National Merit Scholarship Finalist, 2010
- National AP Scholar, 2010
- Robert Byrd Scholarship, 2010
- Eagle Scout, Boy Scouts of America, Troop 93, 2009