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 code.

- **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