CHARLES S. HARRISON

PRESENT ADDRESS
69 Brown St. P.O. Box 3705
Providence, RI 02912
(508)-439-1871
charles_harrison@brown.edu

PERMANENT ADDRESS
9 Garrison Lane
Southborough, MA 01772
github.com/csharrison
linkedin.com/in/csharrison

EDUCATION
Brown University, Providence, RI - Current Undergraduate, 2015
- *Computer Systems* - Made a database of key-value pairs thread safe in C
- *Programming Languages* - Wrote an interpreter for a subset of Python
- *Computational Cognitive Science* - Machine learning experience in Matlab with Neural Networks, k-means clustering, and Bayesian learaning
- *Design and Analysis of Algorithms* - Studied dynamic programming, greedy algorithms, variable length encodings, hashing, and search/optimization problems

SKILLS
Python (Django, Pylons), Javascript, Java, C, Racket, Scala, Matlab, git, HTML, CSS

EXPERIENCE
Software Engineering Intern, Appneta - TraceView (June - Aug. 2013)
- Used Pylons, MySQL, S3, and Cassandra with a reactive in-house frontend library: TBone.js
- Built a data retention system allowing users to selectively save their data indefinitely in S3
- Aggregated data across the app pipeline to show users what in their server's instrumentation needs updating
- Tested client-side code with jQuery test fixtures
- Wrote a web scraper to programmatically back-fill a MySQL table
- Blogged about the experience here: www.appneta.com/blog/charlie-intern/

Django Web Developer, hearo.fm (Nov. 2011 - Present)
- Used Django, Javascript, HTML, and CSS in a social networking site for musicians: hearo.fm
- Built backend support for a robust cloud control service to transport songs to and from a cdn
- Wrote a fast and extensible ranking system for music discovery
- Built a backend system in Django allowing clients to manage multiple groups and bands
- Refactored source JS to maintain state seamlessly with AJAX
- Taught and mentored fresh hires in the Summer of 2012

Teaching Assistant, *Computer Science: An Integrated Introduction (CS 17/18)*
(Aug. 2012 - May 2013)
- Taught students core Computer Science topics in personal office hours and labs
- Experienced in Java, Scheme/Racket, Scala, and OCaml
- Assisted the professor during lectures
- Course websites: cs.brown.edu/courses/cs017 & cs.brown.edu/courses/cs018

Computer Science Student-Teacher, The Rivers School (March - June 2011)
- Taught a group of 7 sophomores Python for my high school senior project
- Students learned how to program 2D games (asteroids, etc.) using the Pygame library
- Final projects can be found on my github