### 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 (CS 33) Made a database of key-value pairs thread safe in C
- Programming Languages (CS 173) Wrote an interpreter for a subset of Python
- Computational Cognitive Science (CLPS 1291) Machine learning experience in Matlab with Neural Networks, k-means clustering, and Bayesian learning
- Design and Analysis of Algorithms (CS 157) Studied dynamic programming, greedy algorithms, variable length encodings, hashing, and search problems

#### Skills

Python (Django, Pylons), Javascript (\$, \_), Java, C, Racket, Scala, Matlab, git, HTML + CSS

#### **EXPERIENCE**

APPNETA - TRACEVIEW

June - August 2013

Software Engineering Intern

- Interfaced with Pylons, MySQL, S3, and Cassandra with a declarative js library: thone
- Frontend testing experience with jQuery test fixtures
- Built a data retention system allowing users to selectively save their data indefinitely in S3
- Wrote a web scraper to programmatically build a history of previous software releases in MySQL, and notify clients when theirs is out of date

#### HEARO.FM

November 2011 - Present

Django Web Development

- 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

# BROWN UNIVERISTY CS TEACHER ASSISTANT

August 2012 - Present

Teaching Assistant for CSCI0170 & CSCI0180 - Computer Science: An Integrated Introduction

- Taught students core Computer Science topics in personal office hours and labs
- Experienced in Java, Scheme (specifically: Racket), and OCaml
- Assisted the professor during lectures
- Course websites: cs.brown.edu/courses/cs017 & cs.brown.edu/courses/cs018

# THE RIVERS SCHOOL

March - June 2011

Student Computer Science Teacher

- Taught a group of 7 sophomores Python for their 2011 Spring trimester
- Students learned how to program 2D games (asteroids, etc.) using the Pygame library