Eric David Brown

197 Summer St, Apt 2, Somerville MA, 02143
(563) 581-8229

Work Experience

Software Engineer, Streamer Team Lead June 2013 - Present
Aereo Inc, Boston, MA

- Led team of four to maintain and add features to the Aereo custom Streamer, written in C++ and Python, which served all video streams to clients on multiple platforms
- Dictated release schedules and features for the Aereo Streamer team, while carrying out packaging and releasing of the Streamer software to the release team
- Improved streaming performance for HLS-based clients by implementing an O(log n) video binary search algorithm in C++ that supplanted an O(n) linear search. Further increased performance by moving to an O(1) time stamp data structure with file system caching of indices

Software Development Intern Summer 2012
Innovative Software Engineering, Iowa City, IA

- Developed Extensive Web Browser Automation Suite in Java and Selenium for use by the Validation Department, with rigorous logging and automated email messages, which reduced manual testing time and dramatically increased overall test coverage
- Implemented rapid development tools for QA staff who lacked programming experience

Education

Bachelor of Science in Engineering Graduated May 2013
The University of Iowa, Iowa City, IA
Major: Computer Engineering; Minor: Computer Science
GPA: 3.7/4.0

Programming Experience

Languages and software

- Extensive Experience in C and C++, including Boost and the STL
- Proficient in Python, Javascript, and Go
- Highly skilled in Git and its workflows, including versioning for software releases
- At home in Linux, especially RedHat distros, and Mac OSX

Development Interests

- Low-level optimization, exploration, and understanding
- Simulation, Artificial Intelligence, and Pathfinding

Personal Project Experience

- Public Github repositories located at https://github.com/edbrown23
- Currently developing a multiplayer strategy game with server components written in Go and client side rendering and interfaces and interfaces in Javascript, including A* Pathfinding and sprite animation
- Created a 3 dimensional world simulation with fluid and erosion mechanics in a procedurally generated infinite landscape using Perlin Noise, implemented in Java

References available upon request