Di Yang (Steven) Shi

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Education

Brown University | Concentration GPA: 4.0   **Providence, RI | September 2014 - Present**
- Intended Concentration: Bachelor of Science in Computer Science
  - Advanced Intro to Computer Science, Software Engineering, Introduction to Probability and Computing

EdX Platform   **August 2013 – May 2014**
- MITx
  - 6.00.1x Introduction to Computer Science and Programming, 6.00.2x Introduction to Computational Thinking and Data Science, 6.002x Circuits and Electronics

Major Projects

Pair Project "Maps" (repo is private due to collaboration policy but can be shared)   **March 2015 – April 2015**
- Implemented in its entirety the backend for an interactive map interface with shortest path searching in simulated real-time traffic
  - Extensive Databasing and Efficient Querying (Database of Graph of Rhode Island)
  - A* search with latitudes and longitudes while accounting for curvature of the Earth
  - KD-Searching for nearest neighbor to a clicked point
  - Trie backed suggestions engine with smart ranking supporting whitespace edit, prefix matching, and levenshtein edit distances
  - Effective networking communications throughout efficient data structures and batching requests
  - Threaded the entire backend using and/or creating thread-safe data structures

Four Person Group Project "Brewer" (repo will be made public)   **April 2015 – May 2015**
- Scratch inspired visual programming language built as an educational tool for teaching basic Java: http://www.brewerapp.com
  - Helped implement program parsing and type checking
  - Created database communications for program storage and loading
  - Wrote entire test suite for network communications and program evaluations

Internship Experience

Grove City Borough - Appointed Junior Council Person   **Grove City, PA | February 2013 – June 2014**
- Co-organized the local Halloween parade and oversaw its fulfillment
- Discussed and debated local issues such as infrastructure, budget, community projects, and new ordinances
- Extensively assessed the legal, communal, and fiscal consequences of opening a small, local dog park as a community revitalization project

Work and Volunteer Experience

Dairy Queen – Blizzard Wizard   **Grove City, PA | April 2013 – June 2014**
- Curling cones and creating the sweetest of desserts

Student Council   **Grove City, PA | September 2012 – June 2013**
- Appointed Head of Fundraising for the United Way Day of Caring
  - Raised over 700 dollars to donate by planning and directing a competitive, month long school fundraiser and organizing a charity concert

Programs

Brown University – Catalyst 2014   **Providence, RI | August 2014**
  - 1 of 15 incoming freshman selected for a rigorous pre-orientation STEM mentoring program aiming to foster collaboration

Center for Student Opportunity – I'm First Scholar   **Providence, RI | June 2014 – present**
  - 1 of 10 selected first generation student ambassadors and bloggers for I'm First organization: www.imfirst.org/author/steven/

Skills and Interests

Programming : Java, Python, JavaScript, jQuery, HTML, CSS, JSON, GitHub, MatLab, SQL, Pyret,
Programming Concepts : Object-Oriented, Functional, Stochastic, Multi-threading and Synchronization, Memory and Search, Markov Modeling, Server-Client Communication, Large Data Computing by Databasing, Automated Testing
Operating Systems: Windows, Macintosh, Linux
Mathematical: Markov Processes, Statistical methods, Probabilistic Analysis, Linear Algebra, Intro Number Theory
Languages: Mandarin (fluent), Fuzhou Dialect (fluent)
Interests: playing music (piano, acoustic guitar), journaling, soccer player for fourteen years, recent tennis starter, RTS (Real Time Strategy) games