Jason Fan

Tufts University | the.jasonfan@gmail.com | thejasonfan.github.io | GitHub: thejasonfan

EDUCATION

Tufts University, Boston *Expected May 2017*
B.S. in Computer Science & Mathematics
GPA: 3.89 / 4.00, Dean's List (Fall 2013 - present)
Relavant courses: *Data Structures, Algorithms, Graphics, Visualization, Programming Languages, Web Programming, Text Mining, Computation Theory, Abstract Algebra, Linear Algebra, Calculus*

EXPERIENCE

Microsoft June - September 2016 (12 weeks)
Software Development Intern, C+E Engineering Systems *Redmond, WA*
· Prototyped a service that allows users to launch and monitor the customization of Virtual Machines on an internal cloud service.

Teaching Assistant - Fall 2015 and Spring 2016 January - May 2016
Machine Structure & Assembly Language Programming (Fall 2015), Computation Theory (Spring 2016)
· Led and assisted lab sessions, and held office-hours weekly, helping students with Machine Structure problems in C in the fall of 2015.
· Held office-hours for undergraduate students 5 hours a week helping students understand questions about NP-completeness, graph-theory and proof writing in the spring of 2016.

Ab Initio Software June - August 2015 (11 weeks)
Software Development Intern *Boston, MA*
· Shipped, built and helped design feature that allows administrators to customize the clients dashboard
· Refactored a collection of anonymous data-structures into a type-safe and easily extensible class hierarchy
· Shipped a Package for Support feature that collected and packaged information about a monitored process.

Microsoft June - July 2013 (5 weeks)
Marketing Intern, Consumer Channels Group, Xbox Team *Hong Kong, China*
· Evaluated and categorized two-thirds Xbox retailer stores in Hong Kong
· Presented and participated at an Asia Pacific Region CCG Train-the-Trainer event for Xbox and Surface Teams.

PROJECTS

Ray Traced Constructive Solid Geometry Renderer Spring 2016
C++, OpenGL *Computer Graphics, Class Project*
· Devised and implemented a method to express and ray trace complex boolean operations applied to 3D shapes.

Force Directed Edge Bundling Methods, Models, and Implementations Fall 2015
Java, 'Processing' Framework/Library *Visualization, Class Project*
· Improved and implemented a physics based, iterative method of grouping edges to simplify complex graphs.

Visualizing the Urbanization of the World with Wikipedia data Spring 2015
Python, JavaScript, D3 *Text Mining in the Humanities, Class Project*
· Parsed 60GB of Wikipedia markup to create a web application to explore when and where settlements around the world were established.

Stealth Shrooms Spring 2015
Unity, C# *2015 Bostino Global Game Jam*
· Hallucination simulation game built with a team of 2 artists and 4 programers in 2 days.

Optimization and building an emulation of RISC-style Machine with 14 instructions Fall 2014
C *Machine Structure and Assembly Language Programming, Class Project*
· The final submission ran performance tests in $1/20^{th}$ of the time taken by the unoptimized submission.

SKILLS

Languages	C/C++, Python, JavaScript, C#, LaTex, ML, (Worked with: Java, HTML)
Frameworks	Node.js, MongoDB, ASP.NET Core (Worked with: SQL, OpenGL, D3)
Tools	Vim, Unix, Git & Github, Perforce, IntelliJ, Visual Studio, Powershell
Other Languages	Mandarin and Cantonese, proficient in spoken spanish