# Jason Fan

Tufts University | the.jasonfan@gmail.com | jason.fan@tufts.edu | GitHub: jasonfan74

#### **EDUCATION**

#### Tufts University, Boston

Expected May 2017

B.S. in Computer Science & Mathematics

GPA: 3.89 / 4.00, Dean's List (2013 - present)

Relavant courses: Data Structures, Algorithms, Graphics, Visualization, Programming Languages, Web Programming, Text Mining

#### **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.

Ab Initio Software

June - August 2015 (11 weeks)

Software Development Intern

Boston, MA

- · Wrote code that currently ships in Ab Initio's process management and monitoring client
- · Built and helped design feature that allows administrators to customize the clients dashboard
- $\cdot$  Refactored a collection of anonymous data-structures into a type-safe and easily extensible class hierarchy
- · Built a Package for Support feature that collected and packaged information about a monitored process.

Microsoft June - July 2010 (5 weeks)

Marketing Intern, Consumer Channels Group, Xbox Team

Hong Kong, China

- · Evaluated and categorized, in person, two-thirds Xbox retailer stores in Hong Kong
- · Participated and presented at an Asia Pacific Region CCG Train-the-Trainer event for Xbox and Surface Teams.

#### PROJECTS AND COURSEWORK

### Ray Traced Constructive Solid Geometry Renderer

Spring 2016

C++, OpenGL

Computer Graphics, Class Project

· Implemented and devised a method to express and ray trace complex boolean operations applied to 3D shapes.

#### Force Directed Edge Bundling Methods, Models, and Implementations

Fall 201

Java, 'Processing' Framework/Library

Visualization, Class Project

· Implemented and improved a physics based, iterative method of grouping edges to simplify complex graphs.

#### Visualizing the Urbanization of the World with Wikipedia data

Spring 201

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 Unity, C#

Spring 2015 2015 Bostino Global Game Jam

Hallucination simulation game built with a team of 2 artists and 4 programers in 2 days.

banaenae Spring 2015

Class Project Tufts University

· A web application allowed users to vote on menu items scraped from Tufts cafeteria websites.

# Optimization and building an emulation of RISC-style Machine with 14 instructions Fall 2014 Class Project Tufts University

· The final submission ran performance tests in  $1/20^{th}$  of the time taken by the unoptimized submission.

#### JPEG Like compression algorithm

Fall 2014

Class Project

Tufts University

· Achieved 30% compression rate on images with 2% lossy errors.

## 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)

Vim, Unix, Git & Github, Perforce, IntelliJ, Visual Studio, Powershell