Thomas Colgrove

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Education

Tufts University, Medford MA
Bachelor of Science in Computer Science, Expected May 2016
GPA: 3.61, Dean's List | Computer Science GPA: 3.76

Relevant Coursework

Data Structures, Machine Structure and Assembly Language Programming, Operating Systems, Programming Languages, Networks, Algorithms , Introduction to Electrical Engineering, Web Programming (Enrolled Spring 2014), Programming Music Apps for the iPad (Spring 2014), Theory of Computation (Spring 2014)

Skills

Programming Languages: C, C++, Java, Python, Javascript
Software: bash, vim, git, MatLab
Operating Systems: Linux, OSX, Windows
Network Protocols: IP, TCP, UDP

Project Examples:

Receipt Reading Module using Tesseract Optical Character Recognition, *Fall 2014*
• Created a backend python module to convert photographs of receipts into ordered pairs of meal name and price, for use in a larger web app to help friends quickly and efficiently split checks.

Jpeg Image Compression, *Spring 2013*
• Modularized C program suite, fully compressing and decompressing an image using a quantization method similar to jpeg.

Universal Machine and Macro Assembler, Spring 2013
• Fully implemented a universal machine and macro assembler in C, with virtual memory and 13 unique program instructions.
• Wrote an exhaustive unit testing suite to create binary test files for the universal machine.

Work Experience

TA for Machine Structure and Assembly Language Programming, January 2013-Present
• Engaged with students to teach key concepts including low level C programming, machine structures, cacheing and locality, optimization, and assembly language programming
• Facilitated Student Labs
• Taught crucial abstract ideas to students in ways that were helpful and easy to understand

Barista at Tower Cafe and Brown and Brew, October 2012-December 2013
• Cooperated with other staff to optimize profit, efficiency, and customer satisfaction