

Matthew Chiaravalloti

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Select Coursework

- Computer & Network Security
- Internet & Web Systems
- Networked Systems
- Distributed Systems
- Database & Info. Systems
- Operating Systems
- Advanced Programming
- Programming for the Web
- Scalable & Cloud Computing
- Software Design & Engineering
- Computer Organization & Design
- Compilers & Interpreters
- Artificial Intelligence
- Analysis of Algorithms
- Big Data Analytics
- Linux/Unix Skills
- Intro to Frontend Web Dev
- Ruby on Rails Web Dev
- Mobile App Dev: Android

Skills

Languages & Frameworks:

- | | |
|-------------|--------------|
| Java | C++ |
| JavaScript | SQL |
| ES6 | MongoDB |
| C | OCaml |
| React/Redux | Haskell |
| Node.js | X86 Assembly |
| Express.js | Hadoop |
| jQuery | MapReduce |
| Ruby/Rails | Spring Boot |
| HTML/CSS | Python |
| | Go |

Other Tools and Skills:

Agile, AWS (EC2, DynamoDB, EMR, S3), Linux, Bash, git, Vim, IntelliJ, Eclipse, Android dev, RESTful API dev

Projects

PennCloud [CIS 505], *Full Stack Developer* - Google Apps (Gmail & Drive) clone implemented using C++
Musikell [CIS 552], *Developer* - Interactive CLI for creating and composing sounds implemented using Haskell
Search! [CIS 555], *Full Stack Developer* - Google clone implemented using Java, Hadoop, Spark, and AWS
Pennbook [NETS 212], *Full Stack Developer* - Facebook clone implemented using Node.js, Express.js, and AWS
Study Buddy [CIS 350], *Frontend Developer* - Web app with JavaScript frontend utilizing Google Maps API and jQuery
NotSnapchat [CIS 195], *Mobile Developer* - Snapchat clone written for Android phones
Common Cinema, *Mobile Developer* - Android app for finding common actors among movies, or vice versa
Color Changer, *Mobile Developer* - Android app for converting between hex and RGB color values (My first published app)

Education

University of Pennsylvania

Bachelor of Science in Engineering in Computer Science 3.22, cumulative May, 2018	Master of Science in Engineering in Computer Science 3.43, in-major May, 2018
Minors: Mathematics, Classical Studies	

Experience

Software Engineer Intern

May - Aug 2017

MongoDB, Stitch

- Before beta-launch in June, address dozens of frontend bugs
- After beta, full-stack work including implementing stack-trace style errors on the backend, updating the node.js driver, refactoring the frontend, and improving the frontend test harness

Intern Member of Technical Staff

May - Aug 2016

VMware, vIDM (Identity Manager)

- Develop a highly scalable, extensible service that allows vIDM to sync with cloud directory services (i.e. Azure AD, Workday, etc)
- Create a generic REST API for interacting with cloud directory services and build Azure AD implementation that supports the API

Head Teaching Assistant (TA)

Aug 2014 - May 2018

U. of Pennsylvania, School of Engineering and Applied Science

CIS-120: Programming Languages and Techniques I

- Plan and lead staff meetings and training of new TAs; coordinate grading and scheduling for TA staff; maintain course infrastructure
- Assist in teaching of functional & OO programming in OCaml & Java
- Hold weekly office hours; lead weekly recitation; grade homework and exams; update homework assignments prior to release

Instructor

June - July 2015

iD Tech Programming Academy, Princeton University

Web Developer

Jan - May 2015

The Daily Pennsylvanian, U. of Pennsylvania Newspaper

Interests

Professional: Systems Programming, Security, Functional Programming
Personal: Rock Climbing, Hiking, Snowboarding, Movies, Cooking, Sudoku