# **Matthew Chiaravalloti**

mattch@seas.upenn.edu

mattchiaravalloti.github.io github.com/mattchiaravalloti linkedin.com/in/matthewchiaravalloti

Master of Science in Engineering in

## Coursework

(201) 926-8279

#### Current

- Advanced Programming
- Analysis of Algorithms
- Artificial Intelligence

#### Prior:

- Internet & Web Systems
- Programming for the Web
- Database & Info. Systems
- Networked Systems
- Operating Systems
- Computer Org. & Design
- Scalable & Cloud Computing
- Software Design & Engineering
- Big Data Analytics
- Intro to Algorithms
- Automata, Computability, and Complexity
- Intro to Computer Architecture
- Linux/Unix Skills
- Intro to Frontend Web Dev
- Ruby on Rails Web Dev
- Programming Languages and Techniques I & II

### Skills

#### Languages & Frameworks:

Java

SQL

JavaScript

MongoDBHadoop

ES6

MapReduce

React/ReduxNode.is

OCaml

- Mode.js

• C

Express.js

Spring Boot

jQuery

Python

HTML/CSS

■ Go

Ruby/Rails

- Go - C++

#### Other Tools and Skills:

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

#### Interests

Rock Climbing, Hiking, Snowboarding, Movies, Cooking, Sudoku

## **Education**

## University of Pennsylvania

Bachelor of Science in Engineering in Computer Science 3.21, cumulative

May, 2018

Computer Science 3.52, in-major May, 2018

Minors: Mathematics, Classical Studies

## Experience

## Software Engineer Intern

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

May - Aug 2017

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 - Present

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

## **Projects**

#### School/Team:

Search!, Backend Developer & Frontend Designer, CIS 555 Final Project

Google clone implemented using Java, Hadoop, Spark, and AWS

Pennbook, Co-Lead & Full Stack Developer, NETS 212 Final Project

- Facebook clone implemented using Node.js, Express.js, and AWS
- http://52.90.42.125:8080/ visit link, sign up, and search for users!

Study Buddy, Frontend Developer, CIS 350 Final Project

• Web app with JavaScript frontend utilizing Google Maps API and jQuery Fync & FB Messenger Encryption, Frontend Developer, PennApps X & XII Personal: Common Cinema & Color Changer, published Android Apps