# Thomas Edward Ragucci

www.thomasedw.com

#### **EDUCATION**

## Williams College, Williamstown, MA

Bachelor of Arts, Computer Science & Economics, May 2019; GPA: 3.58/4.00

**Computer Science**, relevant courses: Data Structures and Advanced Programming, Principles of Programming Languages, Discrete Math, Computer Organization, Algorithm Design & Analysis, Operating Systems, Distributed Systems, Introduction to Computer Security

**Economics**, relevant courses: Principles of Microeconomics, Principles of Macroeconomics, Price & Allocation Theory, Multivariable Calculus, Macroeconomics, Statistics & Data Analysis, Econometrics SAT Reading: 800, Math: 720, SAT Math II: 780

## **SKILLS**

**Programming/Software**: Proficient in C++, and Python. Experience with other programming languages including Java, C, and R. Adept at using macOS, Linux, and Windows systems

**Photography/Videography**: Experience with the Adobe Creative Cloud Suite (specifically Photoshop, Lightroom, and After Effects) and the Apple Final Cut Suite (Final Cut Pro and Motion)

#### RELATED EXPERIENCE

**Williams College** / Computer Science Teaching Assistant

JANUARY 2017 - PRESENT, Williamstown, MA

- Responsible for running 5 hours of TA sessions per week to assist students with labs and coursework
- Spring 2017 semester: CSCI 136, Data Structures and Advanced Programming
- Fall 2017 semester: CSCI 237, Computer Organization

## Williams Students Online / Board Member

SEPTEMBER 2016 - PRESENT, Williamstown, MA

- Design and implement web-based services allowing students to query information about classes, other students, dorms, and faculty. Built using the Ruby on Rails web application framework.
- Responsible for decisions regarding club policy, future projects, and allocation of funds
- Currently developing an online portal for the numerous student organizations on campus

### **Kroll Inc.** / Information Technology & Security Intern

Distributed Systems: thread-based HTTP/1.1 server (C++)

SUMMER 2017, Washington D.C.

- Conducted reviews of LLD (low-level design) documents detailing Kroll's infrastructure transition from inhouse hardware to cloud-based solutions (AWS, O365, etc)
- Ensured there were no incongruities within or between LLDs (e.g. neglecting to include disaster recovery procedures, or incorrectly utilizing policies, procedures, or services)
- Led an effort to research and evaluate a variety of teleconferencing solutions in order to meet the needs of Kroll's different business units, ultimately proposing a solution that is currently being phased in.
- Utilized the internal Cb Response Python API to identify and analyze security threats (i.e. programmatically generated a list of suspicious processes and files on endpoint devices across the firm based on certain behavioral characteristics, including network activity, file access, and registry mods)

## **PROJECTS**

**Movie Watchlist:** Online list of movies that I want to watch / have watched. Data is stored in a PostgreSQL database, and information for each movie is acquired through various APIs and web scraping. (Django web app, Python) **Seam Carving Implementation:** A 'liquid rescaling' app developed with a classmate in Python using the seam carving algorithm with a dynamic programming approach. Currently working on optimizing our implementation by removing redundant computations in the DP table, and converting it to operate online as a web app. (Python) **Personal Website:** Hosts links to projects, personal information, and a dynamic contact form. (Django web app, Python) **Course Projects** (group projects): *Operating Systems*: concurrent thread library, virtual memory manager (both C++)