# Aidan Fitzgerald

### **Education**

#### **Cornell University, College of Engineering**

Ithaca, NY

B.S. IN COMPUTER SCIENCE, GPA: 3.875, DEAN'S LIST (2017)

May 2020

 Relevant Courses: Digital Logic and Computer Organization, Introduction to Analysis of Algorithms, Networks, Discrete Structures, Introduction to Entrepreneurship for Engineers, Object-Oriented Design and Data Structures – Honors, Linear Algebra, Multivariable Calculus, Machine Learning

Stuyvesant High School

New York, NY

• Relevant Courses: AP Computer Science, Systems-Level Programming, Computer Graphics

June 2016

Skills\_

Languages Java, Python, C, MATLAB, SQL, Bash, HTML, CSS, JavaScript, Verilog

**Libraries & Frameworks** Flask, Django, NumPy, SciPy, JUnit

OS's & Databases Linux, SQLite

Hardware Arduino, Raspberry Pi

**Tools** Git, Visual Studio Code, Atom, Eclipse, virtualenv, LaTeX, Google Drive, Typeform

## **Work Experience**

#### **Department of Computer Science, Cornell University**

Ithaca, NY

TEACHING ASSISTANT, OBJECT-ORIENTED DESIGN AND DATA STRUCTURES - HONORS

August 2017 - present

- Find errors in students' code using the Eclipse JUnit plugin and built-in debugger.
- · Administer weekly office hours where students can get help with homework problems, understanding concepts and skills.

Elixir Labs Remote

SOFTWARE ENGINEER May 2017 – Present

• Develop open-source tools that anyone can use to evaluate the trustworthiness of news websites.

Kinetik Remote

SOFTWARE ENGINEERING INTERN

July 2017

• Designed and implemented a web API for Kinetik's health care billing software using the Django REST framework.

Morgan Stanley New York, NY

SUMMER ANALYST, ENTERPRISE INFRASTRUCTURE

July – August 2016

- · Built a distributed file system using EncFS, designed to meet regulatory standards for encrypted public cloud storage.
- Learned about modern cryptography protocols and Linux system administration.

## Hackathons & Projects \_\_\_\_\_

#### **Piecewise Linear Regression**

SIDE PROJECT September 2017

• Implemented a machine learning algorithm that uses dynamic programming to find the sequence of line segments that best fit a set of 2-D points using MATLAB.

PennApps XVI Philadelphia, PA

Participant September 2017

- Developed the back end for a mobile app that people can use to arrange meetups with nearby friends using Flask, Geoalchemy, and PostGIS.
- Volunteered at Hack4Impact's Civic Hacking Workshop.

Life Changing Makeathon Ithaca, NY

FINALIST February 2017

- · Built an Arduino-based prototype for a smartphone accessory that causes LEDs facing the user to flash when it senses an obstacle.
- · Performed market research by surveying other hackathon participants on their cell phone usage habits.
- · Created a pitch deck with product information, our business model, and a demo video to present to the judges.

BigRed // Hacks Ithaca, NY

Participant September 2016

• Developed an Android app that keeps track of the contents of the user's refrigerator and shows the user recipe recommendations based on its contents.

def hacks()

New York, NY

Participant April 2016

• Developed a command-line program in Python that pixelates an image by dividing it into 16x16-pixel blocks and computing the average color of each block using NumPy and SciPy.

#### **Email Client-Server Application**

New York, NY

SYSTEMS-LEVEL PROGRAMMING, FINAL PROJECT

December 2015 - January 2016

Network protocol, command-line client, and server for sending and receiving email using the C socket library.

BigRed // Hacks - MENTOR2017Ithaca, NYStuyHacks IV - MENTOR2017New York, NYHack Reality (Cornell Virtual Reality Hackathon) - Participant2017New York, NYStuyHacks II - MENTOR2016New York, NY

## Leadership & Service

Cornell CS+Social Good Ithaca, NY

FOUNDER & PRESIDENT August 2017 – present

- This year, we plan to develop software for social impact, facilitate community discussions about technology and society, and organize a hackathon.
- Organized and designed the slideshow for an information session, which 19 prospective members attended. Facilitated a group activity in which attendees discussed and then shared the social issues they wanted to work on.
- Designed the website, cornellcs4good.github.io.

Social Hacks New York, NY

FOUNDER & EXECUTIVE DIRECTOR January 2017

- Led a team of 6 to organize a 24-hour hackathon where students solved social problems using technology.
- Persuaded ThoughtWorks to lease us their event space for free in exchange for the title sponsorship.
- Designed the website, www.socialhacks.tech.
- · Marketed to high school and college students through Facebook and used Typeform, SQL, and MailChimp to manage admissions.

CSTUY New York, NY

TEACHING ASSISTANT

July 2015 – May 2016

- Mentored middle and high school students at CSTUY's summer and weekend classes in computer science and software engineering.
- · Volunteered as a mentor at CSTUY's winter hackathon.

Women in Computing at Cornell — REPRESENTATIVE

Cornell Engineering Peer Advising — PEER ADVISOR

Splash at Cornell — TEACHER

2017

Ithaca, NY

Lithaca, NY

Lithaca, NY

Lithaca, NY