Robert Smithers

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EDUCATION

Boston College, Chestnut Hill, MA

Activities:

May 2022

Bachelor of Science in Computer Science

GPA: 3.8

Relevant Courses: Machine Learning, Computer Networks, Algorithms, Computer Systems, Computer

Organization, Database Systems and Applications, Principles of Programming Languages, Visualization, Logic and Computation, Randomness and Computation

BC Computer Science Society, BC Hack the Heights, Air Force ROTC, Intramural

Volleyball, BC Portfolio Challenge, BC Table Tennis, BC Rocket League Team

Sophomore Scholar, Dean's Scholar Nominee, Dean's List First Honors Awards:

Princeton High School, Princeton, NJ June 2018

PROJECTS

Det 355 – Flying Tigers iOS Application

Fall 2019 - May 2022

- Use XCode to develop a 5-star iOS application that is used for accessing cadet resources, establishing a social network, and uploading inspection score data to the cadet wing
- Expand features to allow app to be utilized by 10,000 cadets at other detachments throughout the nation

Deepfake Detection

December 2021

o Construct a Generative Adversarial Network to outperform humans in differentiating real and fake video

Molecular Solubility Prediction

November 2021

Graph Neural Networks trained on data generated from quantum chemistry libraries to predict chemical solubilities at speeds exponentially faster than leading quantum calculation softwares

BC Gym Signups February 2021

- o Implement an autonomous program using BC's gym signup website to secure highly competitive gym slots
- Maintain subscription-based access keys to desktop client utilizing Firebase

PCGuard Spring 2019

- Built a security application which monitors the health status and threat level of personal computers and devices 0
- Features in-app security measures which interact with and secure the device through a paired computer software

WORK EXPERIENCE

Miercom – Technician / Software Engineer

June 2016 – Present

- o Develop integrated penetration testing solutions on emerging technology vendors
- Provide software-based cybersecurity defense and patching on back-end vulnerabilities
- Lead programmer for optimizing usage of multi-million-dollar testbed hardware
- Saved company \$100,000 through enhancing infrastructure functionality and developing innovative improvements on content delivery mechanisms
- Communicate with clients and work with 6 team members to ensure projects meet timeline expectations

Boston College Department of Computer Science – Head Teaching Assistant

January 2019 - May 2022

- o Grade and instruct 15 hours a week for a total of 20 sections of computer science and object-oriented design courses
- o Host office hours for 5 hours a week to communicate with and assist students and professors

Zinna's Bistro - Server

December 2015 - September 2018

LEADERSHIP EXPERIENCE

Air Force Reserve Officer Training Corps

Fall 2018 - Present

- Train 60 cadets in Air Force competencies preparing them for the Professional Officer Course
- Attend 6 hours of classes and 6 hours of physical training weekly
- On executive boards for Armed Forces Communications and Electronics Association, Arnold Air Society, Military Excellence Competition Team, and Phantom Armed Drill Team

VOLUNTEER EXPERIENCE

Boston Building Resources, Boston, MA

Spring 2019

Packed and distributed home improvement supplies for low-income families in the surrounding communities Cranbury First Aid Squad, Cranbury, NJ December 2015-Auguest 2018

Provided Basic Life Support (BLS) as an Emergency Medical Technician (EMT)

SKILLS

Proficiencies: Python, Java, Swift, Linux, HTML, JavaScript, C, XML, PowerShell, OCaml, C++, C#, Perl, Bash Scripting Industry Knowledge: Software Development, Amazon Web Services, Network Security, iOS Development, Penetration Testing, Artificial Intelligence, Machine Learning, GitHub, Docker, Kubernetes, Cryptography, Information Technology