

Robert Smithers

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EDUCATION

Boston College, Chestnut Hill, MA

Expected May 2022

Candidate for Bachelor of Science in Computer Science

GPA: 3.78

- Relevant Courses: Machine Learning, Computer Networks, Algorithms, iOS App Development, Computer Systems, Computer Organization, Database Systems and Applications, Principles of Programming Languages, Visualization, Speech Signal Processing, Logic and Computation, Randomness and Computation, Digital Technology
- Activities: BC Computer Science Society, BC Hack the Heights, Intramural Volleyball, BC Portfolio Challenge, BC Table Tennis, BC Rocket League Team, Air Force ROTC
- Awards: Sophomore Scholar, Dean's Scholar Nominee, Dean's List First Honors

Princeton High School, Princeton, NJ

June 2018

PROJECTS (See: robertsmithers.github.io for more projects)

Deepfake Detection

Fall 2021

- Detect artificially deepfaked videos with machine learning using a modified Resnet architecture

Solubility Prediction

Fall 2021

- Graph Neural Network project to predict solubility of molecules up to 100 times quicker than quantum-chemistry software

Det 355 – Flying Tigers iOS Application

Fall 2019 – Present

- Develop a 5-star iOS application that is used for accessing cadet resources, establishing a social network, and uploading inspection score data to 80 cadets
- Expanding features to allow app to be utilized by 10,000 cadets at detachments throughout the nation

BC Gym Signups

February 2021

- Implement an autonomous gym signup program using BC's gym signup website to secure highly competitive gym slots

Stock Market Predictor

Fall 2020

- Machine learning project using Convolutional Neural Networks and Support Vector Machines to predict buy and sell classifications from historical daily stock price data

PCGuard

Spring 2019

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

WORK EXPERIENCE

Boston College Department of Computer Science – Teaching Assistant

January 2019 – Present

- Grade, instruct, and supervise for Computer Science II and Object-Oriented Design
- Host office hours for 5 hours a week to communicate with and assist students and professors

Miercom – Technician / Engineer Intern

June 2016 – Present

- Conduct malware analysis and penetration testing on emerging technology vendors
- Provide cybersecurity defense and patching to web-based vulnerabilities

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
- Member of 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-August 2018

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

SKILLS

Proficiencies: Swift, Linux, HTML, JavaScript, Java, Python, C, XML, PowerShell, OCaml, C++, C#, Perl, Bash Scripting

Industry Knowledge: Network Security, iOS Development, Software Development, Penetration Testing, Artificial Intelligence, Machine Learning, GitHub, Docker, Kubernetes, Cryptography, Information Technology, Web Development