

# Matt Davison

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## **EDUCATION**

Virginia Tech Honors Computer Science Sophomore with 3.66 GPA – May 2022 Graduation

- Relevant Coursework: Data Structures & Problem Solving
- Currently Enrolled in: Computer Organization & Competitive Programming

## **WORK EXPERIENCE**

Undergraduate Research Assistant at Hume Center; Advisor: Tom Krauss, 2018 – Present

- Implemented Quantum Annealing algorithms using DWave Ocean SDK and ran tests on 2000 Qubit DWave Annealer
- Developed Quantum Annealing algorithms for Unclassified Binary Clustering
- Currently investigating use of Quantum Annealing to analyze binaries to detect security vulnerabilities

Lockheed Martin, May 2019 – August 2019

- Enterprise Operations Tech Intern at Center for Innovation
- Developed backend service to retrain a Recurrent Neural Network for transcribing proprietary audio
- Aided development of frontend page to upload audio clips
- Hosted and Planned a 40+ intern visit to Center for Innovation
- Delivered lessons and developed corresponding application to introduce Quantum Annealing

Equinix Data Centers, June 2018

- Shadowing Solutions Architect Team
- Applying OSI model to develop outline for cloud infrastructure

868 Estate Vineyards & Winery, July 2017 – December 2017

- Bar Back- bar assistance, cooking, customer service

## **ACTIVITIES and PROJECTS**

Currently investigating use of Quantum Annealing to speed up training of Binarized Neural Networks

Ultimate Competitive Ping Pong – Game developed in Java to teach basics of programming

Virginia Tech Competitive Programming Team 2019 –Present

Virginia Tech Cybersecurity Club, 2018-Present

Founder of Woodgrove High School Cyberpatriot Team

## **TECHNICAL SKILLS**

- 4 Years of Java Experience
- 2 Years of Python Experience
- Familiar with Agile and Waterfall development processes
- Familiar with MATLAB, HTML, RobotC, C Experience
- Familiar with using DWave Ocean SDK
- Host Personal VPN & FTP Server, comfortable working on Linux

## **EXTRACURRICULAR**

Virginia Tech Galileo Community, 2018 – 2019

- Professional and Academic Development Community

Ranked in top 5% in Nationwide SANS Institute Cyberstart Cybersecurity competition, August 2017

NoVA Systemic Advanced Cybersecurity Camp

- Wrote pen-testing scripts in Python

Northrop Grumman Cybersecurity Camp

- OSI model and pen-testing basics

Orbital ATK Science & Technology Go For Launch Camp

- Designed research experiment to be carried out on ISS