Matt Davison

Software Engineer Intern

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Solution-oriented and inquisitive with a background in Quantum Computing, Mobile Development, and Cybersecurity.

EDUCATION

B.S. Computer Science
Virginia Tech

08/2018 – 05/2022 *3.63 GPA, 3.83 in Major GPA*

Courses

- Data Structures & Algorithms
- iOS Mobile Development
- Computer Organization
- Problem Solving
- Software Design
- Intro to Docker and Kubernetes
- Competitive Programming

WORK EXPERIENCE

Software Developer Intern
Lockheed Martin

05/2019 – 08/2019 *Center for Innovation - Norfolk, VA*

Achievements/Tasks

- Developed back-end software to retrain Mozilla's Deepspeech Recurrent Neural Network for transcribing proprietary audio
- Developed audio segmenter to trim long audio clips into smaller segments using word detection that can be transcribed- improved transcription accuracy by 30%
- Aided development of front-end page to upload user-generated audio clips
- Planned and Hosted 40+ intern tour of Center for Innovation

Quantum Annealing UGRA
Virginia Tech Hume Center

09/2018 – Present *Blacksburg, VA*

Faculty Advisor: Tom Krauss

Achievements/Tasks

- Developed algorithm for Binary Clustering in O(n) on Quantum Annealers
- Implemented algorithm for determining Graph Isomorphism on a Quantum Annealer using Dwave Ocean SDK
- Investigating Use of Quantum Annealing for Software Validation

Solutions Architect Shadow
Equinix Data Centers

06/2018 – 06/2018 *Ashburn, VA*

Achievements/Tasks

- Shadowed Solutions Architect Team
- Applied OSI model to Design Cloud Infrastructure

SKILLS

Java | C | Python | Swift | iOS/SwiftUI | HTML | CSS | Flask

PROJECTS

Quantum Annealing Embedding Visualizer
- Application that allows users to graphically program qubits and simulate annealing process

Vibe Check
- Webapp that aggregates content from internet and uses contextual sentiment analysis to rate a user's query

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

GIS Data System
- System for indexing and searching features in GIS Records

Music Database
- Application for visualizing music preference data among students

ORGANIZATIONS

Virginia Tech Competitive Programming Team

Virginia Tech Cybersecurity Club

Virginia Tech Linux/Unix Users Group

Virginia Tech Web-Development Club