

DAVE WHITMAN-KINGHORN

SOFTWARE ENGINEER

EDUCATION

Rochester Institute of Technology (RIT):

B.S. in Software Engineering.

Graduated in May 2020.

AFFILIATIONS

Society of Software Engineers (SSE) at RIT (2016-2020)

Member

Previously Laboratory
Operations Committee Head

Sailing Team (2015-2020)

Practices & Regattas

Club Café at RIT (2016-2020)

Founder and previous President

Eagle Scout (2014)

Troop 160 Lexington, MA

- Community service
- Camping
- Sailing

Skills USA Massachusetts

Engineering design competition

- Bronze 2013
- Silver 2014

EXPERIENCE



(AIR FORCE RESEARCH LAB) • SOFTWARE ENGINEERING CO-OP • QUANTUM ALGORITHMS • 2019

Worked on a team with six other software developers to produce two quantum computer simulators. Responsible for design, development, and testing.

Noisy Quantum Computer Simulator: Produced a simulator to replicate noise and real-world errors in a quantum computer to support a published paper.

Photonics Simulator: Developed a multi-part simulator to test experiments for a Quantum Photonic Processor.

Tools: Python, Qiskit, Pyquil, Cirq

SciAps • SOFTWARE ENGINEERING CO-OP • 2018

Worked on a six-member agile software team to create an Android version of a Python desktop application for hardware QA. Responsible for design, development (Full Stack), and testing.

Tools: Android, Java, RxAndroid, Android Studio, Gradle



• SOFTWARE ENGINEERING INTERN • 2017

Developed solutions for the collection of usage metrics from associates to automate feedback.

Virtual tour: Created virtual tour POC for investment centers (with VR support).

Sprout: Planed through inception phase of a new app to encourage younger generations to invest.

Tools: Python, DTW distance algorithm, UI Mockups

PUBLICATIONS

Koch, D., Torrance, A., Kinghorn, D., Patel, S., Wessing, L., & Alsing, P. M. (2019). Simulating Quantum Algorithms Using Fidelity and Coherence Time as Principle Models for Error. *arXiv* preprint *arXiv*:1908.04229.







