

REECE ROBERTSON

reecerobertson@umbc.com | reecejrobertson.github.io | linkedin.com/in/reece-robertson | github.com/reecejrobertson

EDUCATION

PhD, Computer Science

University of Maryland, Baltimore County

May 2027

Baltimore, Maryland

MS, Computer Science

University of Maryland, Baltimore County

December 2024

Baltimore, Maryland

- Advisors: Dr. Samuel Lomonaco & Dr. Sebastian Deffner

- GPA: 3.92

BS, Applied and Computational Mathematics Emphasis (ACME)

Brigham Young University

April 2022

Provo, Utah

- Minor: Computer Science

- GPA: 3.93

- Honors Program

EXPERIENCE

Quantum Computing Engineer, Specialist

KBR

May 2021—Present

Chantilly, Virginia

- Developing software tool to objectively compare 20+ quantum architectures in terms of algorithm gate counts
- Deducing decompositions of high-level quantum operations into primitive gates
- Researching principles of quantum algorithm design and quantum error correction weekly to improve conceptual understanding of project
- Tied for first place in 2021 & 2022 IBM Quantum Challenge and earned advanced distinction

Quantum Computing & Software Development Teaching Assistant

University of Maryland, Baltimore County

August 2022—Present

Baltimore, Maryland

- Preparing and delivering 5+ guest lectures and leading class discussions and presentations
- Writing course material and compiled information into LaTeX documents on weekly basis
- Grading assignments weekly and provided prompt feedback to students

Guest Lecturer

University of Maryland, Baltimore County

August 2022—May 2023

Baltimore, Maryland

- Delivered 3+ lectures to students on programming concepts and course assignments
- Facilitated group and individual project presentation days for 20+ groups of 4-5 students each
- Fielded questions regarding the lecture material and best practices

Algorithm Design Lab Teaching Assistant

BYU Department of Mathematics

August 2021-December 2021

Provo, Utah

- Mentored 90+ beginning programming students and teaching them essential programming concepts
- Assisted students quickly and effectively debug code for 5+ hours per week

Undergraduate Researcher in Quantum Field Theory

BYU Department of Mathematics

July 2020-May 2021

Provo, Utah

- Learned new subjects of quantum mechanics, quantum field theory, and string theory
- Studied interaction of elementary particles using partial differential equations to solve square well problem
- Prepared material to present to professor and research team on weekly basis

PUBLICATIONS

Implementing a High-Performance Quantum Computing Emulator.

May 2022

Reece Robertson and Dan Ventura. In Brigham Young University Undergraduate Honors Thesis Scholars Archive.

AWARDS

Full Tuition Academic Scholarship

January 2020-April 2022

PROFESSIONAL MEMBERSHIPS

Association for Computing Machinery (ACM)

2020-Present

Society for Industrial and Applied Mathematics (SIAM)

2020-Present

Phi Eta Sigma National Honor Society

2017-Present