

# CORI MUKHERJEE WILLIAMS

## EDUCATION

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**Brown University**  
Major: Sc. B. in Computer Science and Economics

**Providence, RI**  
Graduated 2021

## TECHNICAL EXPERIENCE

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**IonQ, Inc.**  
*Software Engineer, Quantum Operating System*

**College Park, MD**  
July 2021 – Present

### *Experimental SDK*

- Implemented new SDK for physicist experiments, dramatically increasing throughput and reliability.
- Essential component for internal research on quantum computer calibration.

### *Gate Parameter Database*

- Developed storage solution and access API for quantum gate parameters based on evolving optical architecture.
- Proved to be an integral part of the changes necessary for [IonQ's Software Configurable Quantum Computer](#).

### *Quantum Program Compiler*

- Currently redesigning the part of our quantum program compilation pipeline that takes in abstract gate sets and incorporates IonQ-specific data and hardware instructions to form an intermediate representation that can then be compiled into firmware instructions.

**Brown University**  
*Teaching Assistant, CS for Social Change*

**Providence, RI**  
Jan – May 2020

*Research Assistant, Dept. of Computer Science Databases Lab*

June – August 2019

- Analyzed Twitter data to assess public opinion on education policy
- Performed sentiment analysis on 70,000 streamed tweets in Python/SQLite

*Teaching Assistant, Discrete Mathematics & Probability*

Jan – May 2019

## OUTSIDE OF WORK

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**IonQ DEI Council**  
*Member*

**College Park, MD**  
April 2023 – Present

**Brown CS Technical Interviewing and Recruiting Class**  
*Curriculum designer and main lecturer*

**Providence, RI**  
April 2020 & April 2021

- Lectured and organized resume reviews and mock interviews for 100 students

**Brown Refugee Youth Tutoring and Enrichment**  
*Tutor*

**Providence, RI**  
2017 – 2021

## TECHNICAL SKILLS

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**Proficient:** Python, SQL, Go, Git      **Experience In:** Mongo, Docker, Rust, JavaScript

## THINGS I LIKE

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Climbing rocks, dance classes, baking, Tanya Reilly's [Being Glue](#), well-planned projects