

# Steven Kordonowy

## Curriculum Vitae

Santa Cruz, California

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🌐 [stevenkordonowy.github.io](https://github.com/stevenkordonowy)

### Education

- 2022–present **Doctor of Philosophy**, *University of California - Santa Cruz*, CA, Computer Science  
Advised by Dr. Alex Kolla  
Quantum computing, theoretical computer science
- 2019–2022 **Masters of Science**, *University of Colorado - Boulder*, CO, Computer Science  
Coursework in Algorithms and Complexity, Quantum Physics and Information  
Quantum science courses across Computer Science, Physics, Chemistry, and Engineering
- 2010–2014 **Bachelor of Science**, *University of Denver*, CO, Mathematics  
Minors: Computer Science, Physics, Psychology
- 2012 **Study Abroad**, *Universidad de Buenos Aires*, Argentina

### Papers

- Sept 2023 **Approximation Algorithms for Quantum Max-d-Cut**, *Collaborators: Charlie Carlson, Zack Jorquera, Alex Kolla*, preprint
- April 2023 **A quantum advantage over classical for local max cut**, *Collaborators: Charlie Carlson, Zack Jorquera, Alex Kolla*, preprint

### Presentations and Posters

- Jan 2023 **Poster: Approximation Algorithms for Quantum Max-d-Cut**, QIP 2023
- Jan 2023 **Poster: A quantum advantage over classical for local max cut**, QIP 2023

### Research Projects

- 2020–2023 **Quantum vs Classical Local Algorithms for Local Maxcut**, *Collaborators: Charles Carlson, Zack Jorquera, Alex Kolla*
- 2023–present **Optimizing quantum max-k-cut**, *Collaborators: Charles Carlson, Zack Jorquera, Alex Kolla*
- 2012 **Summer Institute in Biostatistics**, *Washington University*, St. Louis, MO

### Teaching Experience

- 2022 **Quantum Computing (Instructor)**, *CU-Boulder*
- 2020, 2022 **Discrete Structures (Instructor)**, *CU-Boulder*
- 2021 - 2023 **Undergraduate Algorithms (TA)**, *UCSC, CU-Boulder*
- 2020 - 2023 **Quantum Computing (TA)**, *UCSC, CU-Boulder*
- 2020 **Linear Programming (TA)**, *CU-Boulder*

2019 **Computer Systems (TA)**, *CU-Boulder*

## Awards

2023 **Outstanding TA Award for the Department of Computer Science and Engineering**, *University of California Santa Cruz*

2014 **Herbert J. Greenberg Award for Outstanding Achievements in Mathematics**, *University of Denver*

2013 **Outstanding Mathematics Junior**, *University of Denver*

2012 **Outstanding Mathematics Sophomore**, *University of Denver*

## Professional Experience

2016–2019 **Software Engineer**, *Nasdaq, Inc*, Lakewood, CO

2014–2016 **Software Engineer**, *IntelliData, Inc.*, Greenwood Village, CO

## Volunteer

2015–2018 **Tech Wizards**, *4H*, Sun Valley Youth Center, Denver, CO

## Skills and Technologies

Comfortable programming in any language with expertise in Java, Python, and JavaScript

Quantum circuit programming experience with qiskit and qasm

CP/IP Networking

Common software engineering practices such as git, docker, and command line tools

Cloud computing technologies such as Kubernetes and Kafka

Unix and Windows