

Steven Kordonowy

Curriculum Vitae

Santa Cruz, California

✉ skordono@ucsc.edu

🌐 stevenkordonowy.github.io

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
- 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, arxiv 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