Steven Kordonowy

Curriculum Vitae

Boulder, Colorado
✉ *steven.kordonowy@colorado.edu*
stevenkordonowy.github.io

Education

2022–present **Doctor of Philosophy**, *University of 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.

Research Projects

2021–present **Local Tensor Algorithms for State Preparation**, *Collaborator: Barak Sahinoglu*.

2020–present **Quantum vs Classical Local Algorithms for Local Maxcut**, *Collaborators: Adam Bouland, Alex Kolla, Charles Carlson*.

2020–present **Spectral Aspects of Symmetric Matrix Signings**, *Collaborators: Alex Kolla, Charles Carlson*.

2012 **Summer Institute in Biostatistics**, *Washington University*, St. Louis, MO.

Papers and Presentations

April 2023 **A quantum advantage over classical for local max cut**, *Collaborators: Charlie Carlson, Zack Jorquera, Alex Kolla*, arxiv submission.

Feb 2021 **Poster: Quantum vs Classical Local Algorithms for Local Maxcut**, *Collaborators: Adam Bouland, Alex Kolla, Charles Carlson*, QIP 2021.

Teaching Experience

2022 **Quantum Computing (Instructor)**, *University of Colorado*, CSCI/PHYS 3090.

2020, 2022 **Discrete Structures (Instructor)**, *University of Colorado*, CSCI 2824.

2021 **Algorithms (GTA)**, *University of Colorado*, CSCI 3104.

2020, 2021 **Intro to Quantum Computing (GTA)**, *University of Colorado*, CSCI/PHYS 3090.

2020 **Linear Programming (GTA)**, *University of Colorado*, CSCI 5654.

2019 **Computer Systems (GTA)**, *University of Colorado*, CSCI 2400.

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 .

Awards

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*.

Skills and Technologies

Comfortable programming in any langue 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