

# BRANDON LI

JILA X-Wing X324 · Boulder, CO

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## RESEARCH AND TEACHING EXPERIENCE

2019 – 2020

### HIGH SCHOOL TUTOR

Provided tutoring services in AP Chemistry, Biology, and Calculus.

2022 - 2023

### UNDERGRADUATE RESEARCH ASSISTANT, Tomás Arias Research Group

Paid full-time research during the summer and part-time otherwise. Work consisted of theoretical and computational research in density functional theory.

Fall 2023

### UNDERGRADUATE TEACHING ASSISTANT, Cornell University

Teaching assistant for PHYS 3316, Basics of Quantum Mechanics. Work involved answering questions and assisting students with the problem sets.

Fall 2023 - 2024

### SENIOR THESIS, Tomás Arias Research Group

Combining Wannier functions with mismatched interface theory to study superconducting qubits and twisted graphene bilayers.

Fall 2024 - Now

### GRADUATE RESEARCH ASSISTANT, Gao Group

Application of quantum information techniques to quantum chemistry problems.

Spring 2024 - Now

### GRADUATE TEACHING ASSISTANT, University of Colorado Boulder

Teaching assistant for PHYS 1140 and PHYS 2210

## EDUCATION

2021 – 2024

### BA, CORNELL UNIVERSITY

Physics and Mathematics, *summa cum laude*

2024 – 2030

### PhD, UNIVERSITY OF COLORADO BOULDER

Physics - Quantum information theory

## SKILLS

- Programming in Java, C++, Python, MATLAB
- High performance scientific computing
- Density functional theory
- Quantum field theory, general relativity, quantum information
- LaTeX

## RESEARCH

- Li, B. (2022). 2D Microwave Simulation Using Finite Differences. *Cornell Undergraduate Research Journal*, 1(1), 74–83. <https://doi.org/10.37513/curj.v1i1.659>

## AWARDS & HONORS

- Cornell Freshman Prize Exam, *2nd place (tie)*.
- Phi Beta Kappa
- Dean's List, All semesters
- Yennie Prize (2024)
- Extraordinary senior award (2024)