# Robyn Burger

Ithaca, NY rlb388@cornell.edu

LinkedIn: Robyn-Burger

EDUCATION

### Cornell University - GPA: 3.836

Aug. 2022 - May 2025 (expected)

B.A. Mathematics, B.A. Computer Science

- President, Triphammer Cooperative: Oversees all daily, administrative, and legal logistics of 20-person, student-governed house.
- Cornell Outdoor Education: Instructor for P.E. courses, e.g. basic/intermediate rock climbing, backcountry cooking and caving.

EXPERIENCE

Student Researcher Aug. 2024 - Present

Cornell University CS, Advisors: Dr. Anke Van Zuylen, and Dr. Matthew Eichhorn

Ithaca, NY

• Conducts research to improve time complexity of string parsing algorithm.

• Keywords: algorithms, optimization, linear algebra, string processing.

President, ACSU Dec. 2023 - Present

Association of Computer Science Undergraduates, Cornell

Ithaca. NY

- Oversees all functions of the largest CS club at Cornell, with over 500 active members.
- Collaborates closely with Cornell faculty, the office of Diversity Equity Inclusion and Belonging, and CS corporate sponsors to strategize, plan, and execute college-wide events such as our annual Research Night, Faculty Luncheon, and student mentorship program. acsu.cornell.edu)

# TA, CS4820: Analysis of Algorithms

Aug. 2024 - Present

 $Cornell\ University\ CS$ 

Ithaca, NY

- Assists with creating and presenting recitations topics such as algorithm design, computability theory
- Holds office hours and grades homework and exams

#### Algorithms Researcher

May 2024 - Aug. 2024

Montana State University, Advisor: Dr. Brendan Mumey

Bozeman, MT

- Research Experience for Undergraduates (REU) program, funded by NSF Award No. 2243010
- Created integer linear program to construct phylogeneic trees of tumor samples.
- Implemented algorithm that finds most 'essential' phylogeneic relationships.
- Keywords: Algorithms, combinatorial optimization, integer linear programming, computational biology.

#### Head TA, CS2800: Discrete Structures

Jan. 2023 - May 2024

Cornell University CS

Ithaca, NY

- ullet Created rubrics for homework and exams, then led team of 15 TAs through grading
- Taught weekly discussion course ( $\sim$ 25 students) and held office hours
- Led review lectures, created supplemental material: robynburger.github.io/cs2800)

#### **Backend Software Engineer**

May 2023 - September 2023

Web Development Team, SC Johnson College of Business IT

- Spearheaded the modernization of legacy PHP code by implementing Ruby on Rails, JavaScript, HTML
- Navigated extensive codebases, identifying and resolving intricate bugs across multiple servers and programs, presented deliverables each week to the team.

# Math Directed Reading Program

Aug. 2023 - Dec. 2023

Cornell University, Advisor: Eray Karabiyik

Conducted collaborative study on elliptic curves and their application to cryptography.

## Grants & Awards

- Recipient of Cornell CS 2024 "Most Impactful Student" award
- National Center for Women & Information Technology Travel Support Stipend (\$2,500)
- Cornell Bowers CIS TAPIA scholarship (\$1,500)