

Elliot Bobrow

Curriculum Vitae

Claremont, CA, USA — elliottgreybobrow@gmail.com — elliottbobrow.com

EDUCATION

Harvey Mudd College — Bachelor of Science

Expected May 2027

Joint Major in Mathematics and Computer Science

Relevant coursework: Representation Theory, Commutative Algebra, Advanced Topics in Algebra (p -adic numbers), Real Analysis I (measure theory), Compiler Design, Independent Study on Dependent Types

Harvey S. Mudd Merit Scholarship, GPA 3.95/4.0

Windward School — High School Diploma

Graduated May 2023

GPA 4.3/4.0

RESEARCH EXPERIENCE

Summer@EPFL

Summer Research Intern — June 2025 - August 2025

- Worked with Professor Bryan Ford alongside two other summer interns on the formalization of his logical system *Grounded Arithmetic* in the Isabelle theorem prover
- Took charge of proving large parts of the HOL standard library and our formalization to be primitive recursive, developing predicate to express primitive recursive course-of-values functions
- Helped draft paper for conference submissions
- Participated and presented in reading group on recent papers in the field

UPenn REPL

NSF REU Intern — May 2024 - August 2024

- Worked with Professor Stephanie Weirich and PhD student Yiyun Liu on formalizing σ -calculus semantics and logical relations in Coq
- Took accelerated introduction to Coq and Programming Languages with other students
- Participated in weekly reading club of important papers in the field, leading discussion on linear logic
- Attended weekly seminars and PLClub meetings to learn about current research, culminating in REPL students presenting our work at PLClub

USC SHINE

High School Summer Research Intern — June 2022 - July 2022

- Worked with Professor Jiapeng Zhang and graduate student Chandra Sekhar Mukherjee on computational biology project
- Used unsupervised machine learning to cluster single-cell RNA sequencing data
- Presented poster at poster session

TEACHING EXPERIENCE

Mathematical Analysis I

Teaching Assistant — January 2026 - May 2026

Introduction to mathematical analysis; also many students' first experience writing formal proofs. Held weekly office hours and graded homeworks for clarity and correctness.

Topics in Foundations of Computing

Teaching Assistant — August 2025 - December 2025

New course; held weekly office hours and provided feedback on curriculum. Course covered models of computation and connections to algebra and category theory.

Computer Science Principles & Practice

Teaching Assistant — August 2024 - December 2024

Accelerated introduction to computer science for freshmen. Held weekly office hours and graded homeworks.

PUBLICATIONS & TALKS

Elliot Bobrow, Bryan Ford, and Stefan Milenković. “Have a thing? Reasoning around recursion with dynamic typing in grounded arithmetic.” 2026. arXiv: 2510.25369 [cs.PL]. URL: <https://arxiv.org/abs/2510.25369>.

Elliot Bobrow, Bryan Ford, and Stefan Milenković. “Formalizing Grounded Deduction.” SoCal PLS, Los Angeles, CA, February 27, 2026.

SKILLS

Programming Languages: Rocq, Isabelle/HOL, Haskell, Rust, Racket, C++, Java, JavaScript, TypeScript, Python, HTML, SQL, x86_64 Assembly, Prolog, APL, Mathematica.

Technologies: Git, GitHub, Linux, Vim, L^AT_EX, React, Node.js, Docker, Pandas, NumPy, Microsoft Office, Figma, Handlebars.

OTHER EXPERIENCE

Harvey Mudd Computer Science Student Advisory Board

Member — August 2025 - Present

- Participate in bi-weekly meetings to discuss the state of the department
- Duties range from faculty search assistance, to curriculum redesign, to development of community-building activities

Bluestone Health

Summer Intern — June 2023 - July 2023

- Performed competitive analysis and research to help pick new electronic medical records system
- Wrote scripts to analyze monthly client data, saving about 3 hours per month
- Tested web app
- Worked on UI/UX redesigns, designed promotional content, flyers, and bio sheets

Rust Clippy

Open Source Contributor — March 2021 - March 2023

- Collaborated with developers around the world on the official linting tool for Rust, with over 10,000 stars on GitHub
- Fixed bugs, added features, and suggested improvements

SmartSoft

Summer Intern — July 2021 - August 2021

- Performed competitive analysis
- Sat in on developer meetings

Schoop

Assistant Full Stack Developer — February 2021 - May 2021

- Worked on a webapp with another student from my highschool to store student class schedules
- Learned to navigate existing codebase, communicated with lead developer
- Added integration with Google Calendar to retrieve and display additional events such as meetings