# Benjamin Darnell

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#### WORK EXPERIENCE

#### Graduate Research Assistant

Advised by Prof. Vikram Adve at UIUC

Sept. 2022–Present

Urbana, IL

- Developing techniques to train AI code generation models for low-resource programming languages, with applications in IT automation and agriculture.
- Co-authored An Empirical Comparison of Code Generation Approaches for Ansible, presented at InteNSE '24 (ACM/IEEE).

#### **Graduate Teaching Assistant**

School of Computing, UIUC Sept. 2023-Jan. 2024

Urbana, IL

• CS 421: Developed course material, graded papers, and tutored students in advanced Compilers course.

# Undergraduate Research Assistant

UCSB Programming Languages Lab

June 2020-March 2022

Santa Barbara, CA

- Created Sootty, an open-source data visualization tool for hardware simulations.
- Contributed to a paper on hardware synthesis: Control Logic Synthesis: Drawing the Rest of the OWL
- Developed automatic practice-problem generation tools for CS education tools. Presented research poster at RACA-CON '20.

#### Undergraduate Teaching Assistant

Department of Computer Science, UCSB

Jan. 2020-Dec. 2021

Santa Barbara, CA

• Provided one-on-one support for students in upperdivision Data Structures and Algorithms classes, led review sessions, graded assignments.

# Software Engineering Intern

June-Sept. 2019

Jobvite, Inc. San Mateo, CA

- Built integration testing framework for Jobvite's Candidate Scheduling interface with Selenium webdriver.
- Automated QA testing suite for web interface.

#### Software Engineering Intern Baobab Studios Redwood Shores, CA May-Sept. 2018

• Performed QA testing and automated audio/video conversion for Unity VR experience.

#### **EDUCATION**

# University of Illinois at Urbana-Champaign

M.S., Computer Science (Expected 2026) 2022-Present

### Technion, Israel Institute of Technology

International Student Exchange Program March-Aug. 2022

# University of California, Santa Barbara

College of Creative Studies

B.S. with Highest Honors, Computing 2018-2022

#### TECHNICAL SKILLS

**Programming:** Python, C/C++, Rust, Java, Ruby, OCaml, JavaScript, HTML/CSS

Tools: Git, Docker, LaTeX, Unix Shell

Additional skills: Problem-solving skills, team collaboration, organization

Relevant Courses: Data Structures & Algorithms, Formal Languages, Parallel Programming, Computer Architecture, Computational Geometry, Compilers, Operating Systems, Runtime Systems, Scalable Web Systems.

#### LEADERSHIP AND SERVICE

# Mentor, Google Summer of Code

Free and Open Source Silicon Foundation Summer 2022

• Supervised two college students in developing and releasing an open-source CLI-based waveform viewer.

# Director, SB Hacks

UC Santa Barbara's inclusive, student-run hackathon Santa Barbara, CA

- Led a team of fifteen organizers to plan and execute a large-scale virtual hackathon.
- Oversaw logistics including budget management, virtual venue coordination, catering planning, website development, and outreach.