

Justin Lubin

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Curriculum Vitae, August 2022

Research Vision

Computation is empowering, and programming languages are how we harness it. To that end, I am interested in studying the human aspect of programming to design programming languages, environments, and tools that are more accessible, intuitive, and powerful.

Primary area: programming languages **Secondary area:** human-computer interaction

Education

University of California, Berkeley 2020–
PhD in Computer Science
Advisor: Sarah E. Chasins

University of Chicago 2016–2020
BS in Computer Science (Honors), BS in Mathematics, Minor in Music
GPA: 3.97/4.00 (*summa cum laude*)
Advisor: Ravi Chugh
Honors Thesis: [Forging Smyth: The Impl. of Program Sketching with Live Bidirectional Evaluation](#)

Research Internships

Carnegie Mellon University 2018
Advisors: Jonathan Aldrich (CMU), Alex Potanin (Victoria University of Wellington)
Project: [Approximating Polymorphic Effects with Capabilities](#)

Refereed Conference and Journal Publications

[Exploring the Learnability of Program Synthesizers by Novice Programmers](#) UIST 2022
Dhanya Jayagopal*, [Justin Lubin](#)*, and Sarah E. Chasins (**equal contribution*)
In *Proceedings of the ACM Symposium on User Interface Software and Technology*.

[How Statically-Typed Functional Programmers Write Code](#) OOPSLA 2021
[Justin Lubin](#) and Sarah E. Chasins
In *Proceedings of the ACM on Programming Languages (PACMPL)*, Issue OOPSLA.

[Program Sketching with Live Bidirectional Evaluation](#) ICFP 2020
[Justin Lubin](#), Nick Collins, Cyrus Omar, and Ravi Chugh
In *Proceedings of the ACM on Programming Languages (PACMPL)*, Issue ICFP.

[Sketch-n-Sketch: Output-Directed Programming for SVG](#) UIST 2019
Brian Hempel, [Justin Lubin](#), and Ravi Chugh
In *Proceedings of the ACM Symposium on User Interface Software and Technology*.

Deuce: A Lightweight User Interface for Structured Editing

ICSE 2018

Brian Hempel, [Justin Lubin](#), Grace Lu, and Ravi Chugh

In *Proceedings of the International Conference on Software Engineering*.

Workshop Publications

Type-Directed Program Transformations for the Working Functional Programmer PLATEAU 2019

[Justin Lubin](#) and Ravi Chugh

In *Proceedings of the Workshop on Evaluation and Usability of Programming Languages and Tools*.

Honors

Fellowships

NSF Graduate Research Fellowship (GRFP)

2020–2025

Student Research Competitions

3rd Place Graduate at CHI, *How Statically-Typed Functional Programmers Author Code* 2021

1st Place Undergraduate at SPLASH, *Approximating Polymorphic Effects with Capabilities* 2018

Teaching Awards

Outstanding Graduate Student Instructor Award

2022

Honor Societies

Sigma Xi

2020–

Phi Beta Kappa

2019–

Academic Honors

Enrico Fermi Scholar (University of Chicago)

2020

Harper Award (University of Chicago)

2020

Student Marshal (University of Chicago)

2019–2020

Dean's List (University of Chicago)

2016–2020

Invited Presentations and Seminars

Dagstuhl

[Theories of Programming](#)

2022

How Statically-Typed Functional Programmers Write Code

UPenn PLClub

2022

UCSD Programming Languages Seminar

2021

Teaching

University of California, Berkeley

[CS 164: Programming Languages and Compilers](#) (TA)

Fall 2022

[CS 164: Programming Languages and Compilers](#) (Head TA)

Fall 2021

Received Outstanding Graduate Student Instructor Award

University of Chicago

CMSC 22300: Functional Programming (TA)

Spring 2020

CMSC 16100: Honors Introduction to Programming I (Grader)

Fall 2018

Mentorship

Research Advisees

Jeremy Ferguson (Undergraduate @ UC Berkeley) 2022–

Kevin Ye (Undergraduate @ UC Berkeley) 2022–

Jacob Yim (Undergraduate @ UC Berkeley) 2022–

Fayaz Shaik (Undergraduate @ Ohlone College; **TTE REU** mentee) 2021–2022

Dhanya Jayagopal (Undergraduate and MS @ UC Berkeley; MS advisee) 2020–2022

*MS Thesis: **Study of Program Synthesizers & Novice Programmers***

Co-first authorship at UIST 2022

SIGPLAN-M Mentees

Carolina Carreira (PhD @ CMU Portugal) 2022–

Adharsh Kamath (Research Fellow @ MSR India) 2022–

Additional Mentees

Kasozi Vincent (MS @ University of Chlef) 2022–

External Service

External Reviewer

Formal Methods in System Design (FMSD) 2022

Symposium on User Interface Software and Technology (UIST) 2021

Social Sessions Co-Organizer

PL+HCI “Swimmer” School 2022

Student Volunteer

Elm in the Spring Conference 2019

International Conference on Functional Programming (ICFP) 2018

Internal Service

UC Berkeley Programming Systems Research Group

Visit Days Area Student Coordinator 2022

Seminar Organizer 2021–2022

Graduate Admissions Student Representative Winter 2021

Visit Days Peer Advisor 2021, 2022

Community Service

#ShutdownPL, Co-organizer 2020–2022

Organization to identify, discuss, and organize around opportunities for anti-racist change in the programming languages community.