

Ravi Chugh | Co-CV

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▬ Publications

2007 – 2013

Radar

PLDI 2008

SIF

PLDI 2009

Fine

→ POPL 2010, ESOP 2010, PLDI 2010

System D

→ ICFP 2011, POPL 2012, → TOPLAS 2012

DJS

→ ECOOP 2012, OOPSLA 2012

2014 – 2020

IsoLate

→ POPL 2015, ESOP 2015

Sketch-n-Sketch

→ POPL 2016, ICSE-C 2016, PLDI 2016

Sketch-n-Sketch

UIST 2016

Sketch-n-Sketch (Deuce)

→ OOPSLA 2017, ICSE 2018

Sketch-n-Sketch

OOPSLA 2018

Hazelnut Live

→ OOPSLA 2018, POPL 2019

Predicting Types From Names

→ IAAI 2019

Sketch-n-Sketch

→ CHI 2019, → ECOOP 2019, UIST 2019

Smyth

→ POPL 2020, → PLDI 2020, ICFP 2020

TSE

VL/HCC 2020

2021 –

Ivy

→ VIS 2020, CHI 2021

Hazel Livelits

→ POPL 2021, PLDI 2021

Delta Dictionaries

→ CPP 2021

Maniposynth

ECOOP 2022

Creative Coding Students

→ UIST 2022, CHI 2023

Prong

VL/HCC 2023

Code Style Sheets

→ PLDI 2024, → OOPSLA 2024, → POPL 2025, OOPSLA 2025

Creative Coding Experts

CHI 2025

Rocks

UIST 2025

▬ Books

Programming with Direct Manipulation, Foundations and Trends in PL

→ NOW ~2021

▬ Research Presentations (selected)

Shonan, “Bidirectional Transformations: Foundations and Applications”

→ Shonan 2025

Shonan, “Exploratory and Live Software Development”

→ Shonan 2019

IFIP TC2 (Software Theory and Practice) Working Group 2.16 (Language Design)

→ WG2.16 2025

→ WG2.16 2024

→ WG2.16 2019

→ WG2.16 2019

→ WG2.16 2018

→ Professional Service (selected)

Program Committees

Programming Language Design and Implementation	→ PLDI 2026
Onward! Conference	→ Onward! 2025
Programming Language Design and Implementation	→ PLDI 2025
Object-Oriented Programming Languages, Systems, and Applications	→ OOPSLA 2025
Onward! Conference	→ Onward! 2024
Symposium on Visual Languages and Human Centric-Computing	→ VL/HCC 2024
Programming Language Design and Implementation	→ PLDI 2024
Symposium on SPLASH-E (roughly “SE/PL + Education”)	→ SPLASH-E 2023
Programming Language Design and Implementation	→ PLDI 2023
Haskell Symposium	→ Haskell 2022
Symposium on Functional and Logic Programming	→ FLOPS 2022
European Conference on Object-Oriented Programming	→ ECOOP 2020
International Conference on Functional Programming	→ ICFP 2017
Architectural Support for Programming Languages and Operating Systems	→ ASPLOS 2016

Grant Proposal Panels and Reviews

National Science Foundation	→ 2018, → 2021, → 2023, → 2024
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→ Academic Honors

Sloan Foundation

Research Fellowship	→ Sloan 2018, → Sloan 2019, → Sloan 2020
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→ Grants

National Science Foundation	2014
CRII: SHF: Functional Reactive Programming for Functional Reactive Presentations	→ ~\$175,000
Google, Faculty Research Award	2015
Prodirect Manipulation for 2D Vector Graphics	→ ~\$50,000
Google, Faculty Research Award	2015
Prodirect Manipulation for Designing Web-Based User Interfaces	→ ~\$50,000
Google, Faculty Research Award	2019
Sketch-n-Sketch Docs: Bidirectional JavaScript in Google Docs	→ ~\$50,000
National Science Foundation	2019
SHF: Medium: Integrative Foundations for Live Programming Assistants With Cyrus Omar and Peter-Michael Osera	→ ~\$500,000 / ~\$1,200,000
University of Chicago, Women’s Board	2021
Enhancing the Programming Environment and Curriculum for CMSC 11111: Creative Coding	→ ~\$20,000
National Science Foundation	2022
SHF: Small: Direct Manipulation Programming Systems for Creative Coding Written with Andrew McNutt	→ ~\$600,000
University of Chicago, Women’s Board	2023
Creative Coding: Making Programming More Accessible to Non-Majors Through Curriculum and Tool Design	→ ~\$18,500
National Science Foundation	2025
SHF: Small: Code Style Sheets Written with Sam Cohen	→ ~\$600,000