

Harrison Goldstein

harrisongoldste.in

hgo@seas.upenn.edu ✉

[@hgoldstein95](https://twitter.com/hgoldstein95) 🐦

Publications

Papers

Parsing Randomness OOPSLA 2022

*Do Judge a Test by Its Cover:
Combining Combinatorial and
Property Based Testing* ESOP 2021

*Programming Language Support
for Natural Language Interaction* SysML 2018

Other

Ungenerators (Poster) ICFP 2021

*Conferences after COVID:
An Early-Career Perspective* SIGPLAN
PL Perspectives

*Algebraic Combinatorial
Testing (Poster)* POPL 2020

Leadership

Editor in Chief (Ongoing) PLClub Blog
Social Chair POPL 2021
AV Coordinator ICFP 2020
Research Mentor DeepSpec REU
Mentor SIGPLAN-M

Research Interests

Property-Based Testing

QuickCheck, Combinatorial Testing

Functional Programming

Monads, Continuations, Haskell

Type Systems

Refinement Types, Bidirectional Type Checking

Formal Languages

Brzozowski Derivatives, Language Models

My love for learning underpins almost everything that I do—I take every chance I can to learn and grow. I am driven, focused, and goal-oriented, and I bring those values to all of the work that I do.

In my free time I love to cook, stream TV and movies, and spend time with friends.

Please reach out via email or Twitter for references or other information.

Education

University of Pennsylvania Present

Pursuing PhD in Computer Science

Cornell University Fall 2014 - Spring 2019

BS in Computer Science GPA 4.08

MEng in Computer Science GPA 4.02

Teaching

Penn CIS 552, Head TA Fall 2020 and 2021

Penn CIS 810, Head TA Spring 2021

Cornell CS 3110, Head TA Fall 2017

Cornell ELCP, Head TA Spring 2017

Cornell CS 2112, TA Fall 2016

Work Experience

Amazon Web Services Summer 2020
Research Intern

Expanded and formalized a model of AWS access policies that captured the full complexity of the authorization system.

Explored an embedding of the model into SMT, to be used in the Zelkova tool.

Broadway Technology Summer 2017
Software Engineer - Summer 2018

Collaborated throughout the organization on tools that streamlined Broadway's operations.

Led a number of projects, as an internal consultant, project manager, and developer.

SIG, LLP Summer 2016
Technology Intern

Last Second Beach, LLC Fall 2015
Chief Technology Officer - Spring 2016

Honors and Awards

Certification in Engineering Leadership Cornell ELCP

1st Place Business Plan Competition Cornell SHA
Eagle Scout Boy Scouts of America