

# Harrison Goldstein

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## Publications

### Papers

*Do Judge a Test by Its Cover:  
Combining Combinatorial and  
Property Based Testing* **ESOP '21**

*Programming Language Support  
for Natural Language Interaction* **SysML '18**

### Other

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

*Algebraic Combinatorial  
Testing (Poster)* **POPL 2020**

*Ungenerators (Poster)* **ICFP 2021**

## Leadership

Editor in Chief **PLClub Blog**

Social Chair **POPL '21**

AV Coordinator **ICFP '20**

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

Brzowski 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 '14 - Spring '19**

BS in Computer Science **GPA 4.08**

MEng in Computer Science **GPA 4.02**

## Teaching

Head TA (1 Semester) **Cornell CS 3110**

Head TA (2 Semesters) **Penn CIS 552**

Head TA (1 Semester) **Penn CIS 810**

Head TA (1 Semester) **Cornell ELCP**

TA **Cornell CIS 2112**

## Work Experience

**Amazon Web Services** **Summer '20**

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 Technolgy** **Summer '17**

Software Engineer **- Summer '18**

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 '16**

Technology Intern

**Last Second Beach, LLC** **Fall '15**

Cheif Technology Officer **- Spring '16**

## Honors and Awards

Certification in Engineering Leadership **Cornell ELCP**

1st Place Business Plan Competition **Cornell SHA**

Eagle Scout **Boy Scouts of America**