

Ben Greenman
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RESEARCH INTERESTS

General interests: Language design issues regarding proofs, performance, and people. What guarantees can a language offer, how efficiently can it run, and to what extent does it help users meet their goals?

Specific interests: Migratory Typing, Language Interoperability, Type Theory, Formal Methods

EDUCATION

- Northeastern University 2014 – 2020
 - Degree* Ph.D
 - Area* Programming Languages
 - Advisor* Matthias Felleisen
 - Thesis* Deep and Shallow Types
- Cornell University 2013 – 2014
 - Degree* Master of Engineering
 - Major* Computer Science
 - Advisor* Ross Tate
- Cornell University 2010 – 2013
 - Degree* Bachelor of Science
 - Major* Industrial and Labor Relations
 - Minor* Computer Science
- Hudson Valley Community College 2009 – 2010
 - General Studies*

EMPLOYMENT

- University of Utah 2023 – ongoing
 - Assistant Professor
- Brown University 2021 – 2023
 - Postdoctoral Researcher, CIFellows 2020
- Knightsbridge Park 2017
 - Consultant, Web Scraping

- Cornell University
Research Assistant 2012 – 2014
- Rentenna Inc.
Software Engineering Intern 2012 – 2014

TEACHING

- Topics in PL and Systems: Tables and Humans
Organizer 2021
- Software Development
Teaching Assistant 2018, 2020
- Fundamentals I (Computing and Programming)
Teaching Assistant 2016
- Object-Oriented Design
Teaching Assistant 2016
- Functional Programming and Data Structures
Teaching Assistant 2012 – 2014

STUDENTS SUPERVISED

- Taylor Allred
M.S., University of Utah 2022 – ongoing
- Siddhartha Prasad
Ph.D., Brown University 2022 – ongoing
- Qianfan Chen
Sc.B. with Honors [thesis], Brown University 2021 – 2022
- Kuang-Chen Lu
Ph.D., Brown University 2021 – 2022
- Milo Davis
B.S., Northeastern University 2017
- Zeina Migeed
B.S., Northeastern University 2016 – 2017

AWARDS

- NSF SHF: Small: Little Tricky Logics
role: postdoc 2023 – 2025
- CRA/CCC/NSF CI Fellowship 2021 – 2023

- SIGPLAN Student Scholarship to: [50 Years of the ACM A.M. Turing Award](#) 2017
- Northeastern CCIS Graduate Community Service Award 2016
- Cornell CS Teaching Award 2014
- Cornell CS Teaching Award 2013

PROFESSIONAL SERVICE

- External Review Committee [ESOP 2023](#)
- Co-Chair of Artifact Evaluation Committee & ERC [OOPSLA 2023](#)
- Program Committee [TFP 2023](#)
- Program Committee [HATRA 2022](#)
- Program Committee [DLS 2022](#)
- Co-Chair of Artifact Evaluation Committee & ERC [OOPSLA 2022](#)
- Program Committee [ICFP 2021](#)
- Program Committee [PLDI 2021](#)
- Artifact Evaluation Committee [ECOOP 2017](#)
- Artifact Evaluation Committee [OOPSLA 2017](#)
- Artifact Evaluation Committee [OOPSLA 2016](#)

PUBLICATIONS

Journal

- Ben Greenman, Christos Dimoulas, and Matthias Felleisen. [TOPLAS 2023](#)
Typed–Untyped Interactions: A Comparative Analysis
- Ben Greenman, Asumu Takikawa, Max S. New, Daniel Feltey, Robert Bruce Findler, Jan Vitek, and Matthias Felleisen. [JFP 2019](#)
How to Evaluate the Performance of Gradual Type Systems

Conference, Symposium, and Hybrid Conference / Journal

- Ben Greenman, Sam Saarinen, Tim Nelson, and Shriram Krishnamurthi [Programming 7.2, 2023](#)
Little Tricky Logic: Misconceptions in the Understanding of LTL
- Kuang-Chen Lu, Ben Greenman, Carl Meyer, Dino Viehland, Aniket Panse, and Shriram Krishnamurthi [Programming 7.1, 2023](#)
Gradual Soundness: Lessons from Static Python

- Siddhartha Prasad, Ben Greenman, Tim Nelson, John Wrenn, and Shriram Krishnamurthi Koli Calling, 2022
Making Hay from Wheats: A Classsourcing Method to Identify Misconceptions
- Ben Greenman PLDI 2022
Deep and Shallow Types for Gradual Languages
- Ben Greenman, Lukas Lazarek, Christos Dimoulas, and Matthias Felleisen Programming 7.2, 2022
A Transient Semantics for Typed Racket
- Kuang-Chen Lu, Ben Greenman, and Shriram Krishnamurthi Programming 7.2, 2022
Types for Tables: A Language Design Benchmark
- Lukas Lazarek, Ben Greenman, Matthias Felleisen, and Christos Dimoulas ICFP 2021
How to Evaluate Blame for Gradual Types
- Ben Greenman, Matthias Felleisen, and Christos Dimoulas OOPSLA 2019
Complete Monitors for Gradual Types
- Preston Tunnell Wilson, Ben Greenman, Justin Pombrio, Shriram Krishnamurthi. DLS 2018
The Behavior of Gradual Types: A User Study
- Daniel Feltey, Ben Greenman, Christophe Scholliers, Robert Bruce Findler, and Vincent St. Amour. OOPSLA 2018
Collapsible Contracts: Fixing a Pathology of Gradual Typing
- Ben Greenman, Matthias Felleisen. ICFP 2018
A Spectrum of Type Soundness and Performance
- Ben Greenman, Zeina Migeed. PEPM 2018
On the Cost of Type-Tag Soundness
- Sam Tobin-Hochstadt, Matthias Felleisen, Robert Bruce Findler, Matthew Flatt, Ben Greenman, Andrew M. Kent, Vincent St-Amour, T. Stephen Strickland, and Asumu Takikawa. SNAPL 2017
Migratory Typing: 10 Years Later
- Stephen Chang, Ben Greenman, and Alex Knauth. POPL 2017
Type Systems as Macros
- Asumu Takikawa, Daniel Feltey, Ben Greenman, Max S. New, Jan Vitek, and Matthias Felleisen. POPL 2016
Is Sound Gradual Typing Dead?
- Ben Greenman, Fabian Muehlboeck, and Ross Tate. PLDI 2014
Getting F-Bounded Polymorphism into Shape

Workshop

- Asumu Takikawa, Daniel Feltey, Ben Greenman, Max S. New, Jan Vitek, and Matthias Felleisen. STOP 2015
Position Paper: Performance Evaluation for Gradual Typing

INVITED TALKS

- [VardiFest, NJPLS](#) 2022
Little Tricky Logic: Misconceptions in the Understanding of LTL
- [Racket Con](#) 2020, 2022
Shallow Typed Racket, Shallow and Optional Types for Typed Racket
- [Boston University POPV Seminar](#) 2020
Complete Monitoring for Gradual Types
- [GRACE Workshop](#) 2018
Three Approaches to Gradual Typing

VOLUNTEERING

- Bootstrap Professional Development Teaching Assistant Summer 2021
- [Housing Chair](#) [SPLASH 2018](#)
- Northeastern CCIS Hiring Committee Student Representative Spring 2018
- PRL Offsite Organizer Fall 2019
- [Each One Teach One](#) Fall 2015
AP Java Tutor
- Student Volunteer [OOPSLA 2019](#); [Turing Celebration 2017](#); [POPL 2016, 2018](#);
[PLDI 2016](#); [ICFP 2015, 2018](#); [ECOOP 2015, 2016](#)
- Ithaca Media Arts Teacher, LEGO Mindstorms Camp Summer 2012
- Cornell Math Explorers Module Designer Winter 2011