

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

- 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

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

Workshop

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

INVITED TALKS

- VardiFest 2022
Little Tricky Logic: Misconceptions in the Understanding of LTL

- [Racket Con](#) 2020
Shallow Typed Racket
- [Boston University POPV Seminar](#) 2020
Complete Monitoring for Gradual Types
- [GRACE Workshop](#) 2018
Three Approaches to Gradual Typing

VOLUNTEERING

- Bootstrap Professional Development Summer 2021
Teaching Assistant
- Housing Chair [SPLASH 2018](#)
- Northeastern CCIS Hiring Committee Spring 2018
Student Representative
- PRL Offsite Fall 2019
Organizer
- [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 Summer 2012
Teacher, LEGO Mindstorms Camp
- Cornell Math Explorers Winter 2011
Module Designer