

Ben Greenman  
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## RESEARCH INTERESTS

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*General interests:* Language design issues regarding proofs, performance, and people. What guarantees do languages offer, how efficiently can they run, and to what extent do they help users meet their goals?

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

## EDUCATION

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- 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

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- University of Utah 2023 – ongoing
  - Assistant Professor
- Brown University 2021 – 2023
  - Postdoctoral Researcher, CIFellows 2020
  - Mentor* Shriram Krishnamurthi

- Knightsbridge Park  
Consultant, Web Scraping 2017
- Cornell University  
Research Assistant 2012 – 2014
- Rentenna Inc.  
Software Engineering Intern 2012 – 2014

## TEACHING

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- 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

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- Ashton Wiersdorf  
Ph.D., University of Utah 2022 – ongoing
- 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

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- NSF SHF: Small: Little Tricky Logics 2023 – 2025  
Postdoc
- 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

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

## PUBLICATIONS

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### 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, JFP 2019  
Jan Vitek, and Matthias Felleisen.  
*How to Evaluate the Performance of Gradual Type Systems*

### Conference, Symposium, and Hybrid Conference / Journal

- Ben Greenman ACM REP 2023  
*GTP Benchmarks for Gradual Typing Performance*
- 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  
*Gradual Soundness: Lessons from Static Python* Programming 7.1, 2023
- Siddhartha Prasad, Ben Greenman, Tim Nelson, John Wrenn, and Shriram Krishnamurthi  
*Making Hay from Wheats: A Classsourcing Method to Identify Misconceptions* Koli Calling, 2022
- Ben Greenman  
*Deep and Shallow Types for Gradual Languages* PLDI 2022
- 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. STOP 2015  
*Position Paper: Performance Evaluation for Gradual Typing*

## INVITED TALKS

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- [TLf@AAAI-SSS'23](#) 2023  
*Towards LTLf Misconceptions*
- [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

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- 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