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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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- **Programming Languages**  
Co-Instructor 2023
- **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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- Suyasha Bobhate  
M.S, University of Utah 2023 – ongoing
- Rob Durst  
–, not a student 2023 – 2023
- Caspar Popova  
–, not a student 2023 – ongoing
- Vivaan Rajesh  
–, Hillcrest High School 2023 – ongoing
- Aniket Karna  
M.S., University of Utah 2023 – 2023
- Dibri Nsofor  
Ph.D., University of Utah 2023 – ongoing

- Ashton Wiersdorf  
Ph.D., University of Utah 2022 – ongoing
- Taylor Allred  
M.S., University of Utah 2022 – 2023
- 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  
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

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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

## MEMBERSHIPS

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- IEEE 2023 – ongoing
- IEEE Computer Society 2023 – ongoing
- ACM 2023 – ongoing
- ACM SIGPLAN 2016 – ongoing

## PUBLICATIONS

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### Journal

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

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

- Ben Greenman, Alan Jeffrey, Shriram Krishnamurthi, and Mitesh Shah *Privacy-Respecting Type Error Telemetry at Scale* [Programming 8.3, 2024](#)
- Siddhartha Prasad, Ben Greenman, Tim Nelson, and Shriram Krishnamurthi *Conceptual Mutation Testing for Student Programming Misconceptions* [Programming 8.2, 2024](#)
- Siddhartha Prasad, Ben Greenman, Tim Nelson, and Shriram Krishnamurthi *Generating Programs Trivially: Student Use of Large Language Models* [CompEd, 2023](#)
- Ben Greenman, Matthias Felleisen, and Christos Dimoulas *How Profilers Can Help Navigate Type Migration* [OOPSLA 2023](#)
- Matthew Flatt, Taylor Allred, Nia Angle, Stephen De Gabrielle, Robert Bruce Findler, Jack Firth, Kiran Gopinathan, Ben Greenman, Siddhartha Kasivajhula, Alex Knauth, Jay McCarthy, Sam Phillips, Sorawee Porncharoenwase, Jens Axel Søgaard, and Sam Tobin-Hochstadt *Rhombus: A New Spin on Macros Without All The Parentheses* [OOPSLA 2023](#)
- Lukas Lazarek, Ben Greenman, Matthias Felleisen, and Christos Dimoulas *How to Evaluate Blame for Gradual Types, Part 2* [ICFP 2023](#)
- Ben Greenman *GTP Benchmarks for Gradual Typing Performance* [ACM REP 2023](#)
- Ben Greenman, Sam Saarinen, Tim Nelson, and Shriram Krishnamurthi *Little Tricky Logic: Misconceptions in the Understanding of LTL* [Programming 7.2, 2023](#)

- 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 6.2, 2022  
*A Transient Semantics for Typed Racket*
- Kuang-Chen Lu, Ben Greenman, and Shriram Krishnamurthi Programming 6.1, 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

- Taylor Allred, Xinyi Li, Ashton Wiersdorf, Ben Greenman, and Ganesh Gopalakrishnan JuliaCon 2023  
*FlowFPX: Nimble Tools for Debugging Floating-Point Exceptions*
- 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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- [BYU Grad Seminar](#) 2023  
*How Profilers Can Help Navigate Type Migration*
- [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  
Module Designer

Winter 2011