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, Typ	e Theory, Formal Methods
Education	
 Northeastern University Degree Ph.D Area Programming Languages Advisor Matthias Felleisen Thesis Deep and Shallow Types 	2014 - 2020
 Cornell University Degree Master of Engineering Major Computer Science Advisor Ross Tate 	2013 - 2014
 Cornell University Degree Bachelor of Science Major Industrial and Labor Relations Minor Computer Science 	2010 - 2013
• Hudson Valley Community College General Studies	2009 - 2010
Employment	
University of Utah Assistant Professor	2023 – ongoing
• Brown University Postdoctoral Researcher, CIFellows 2020	2021 - 2023
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	2020
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

Journal

Publications ___

• 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, 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
- Siddhartha Prasad, Ben Greenman, Tim Nelson, John Wrenn, and Shriram Krishnamurthi 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 Krishnan <i>The Behavior of Gradual Types: A User Study</i>	nurthi. 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 F Ben Greenman, Andrew M. Kent, Vincent St-Amour, T. Stephen Strickland and Asumu Takikawa. Migratory Typing: 10 Years Later 	
• 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	

 ${\it Little\ Tricky\ Logic:\ Misconceptions\ in\ the\ Understanding\ of\ LTL}$

2022

• VardiFest

• Racket Con Shallow Typed Racket	2020
• Boston University POPV Seminar Complete Monitoring for Gradual Types	2020
• GRACE Workshop Three Approaches to Gradual Typing	2018
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 AP Java Tutor	Fall 2015
• 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