Ben Greenman

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Providence RI 02912

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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	
Brown University	2021 – ongoing
Postdoctoral Researcher, CIFellows 2020	2021 - Ongoing
Knightsbridge Park	2017
Consultant, Web Scraping	
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2012 - 2014

• Cornell University

Research Assistant

TEACHING _____ • Topics in PL and Systems: Tables and Humans 2020 Organizer • Software Development 2018, 2020 **Teaching Assistant** • Fundamentals I (Computing and Programming) 2016 Teaching Assistant • Object-Oriented Design 2016 **Teaching Assistant** • Functional Programming and Data Structures 2012 - 2014**Teaching Assistant** STUDENTS SUPERVISED _ • Siddhartha Prasad 2022 - ongoing Ph.D., Brown University • Qianfan Chen 2021 - 2022Sc.B. with Honors, Brown University • Kuang-Chen Lu 2021 - ongoing Ph.D., Brown University • Milo Davis 2017 B.S., Northeastern University • Zeina Migeed 2016 - 2017B.S., Northeastern University Awards _____ • CRA/CCC/NSF CI Fellowship 2021 - ongoing • 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

2012 - 2014

• Rentenna Inc.

Software Engineering Intern

PROFESSIONAL SERVICE • Program Committee **HATRA 2022** • Program Committee **DLS 2022** • Artifact Evaluation Committee Co-Chair 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,
JFP 2019
Jan Vitek, and Matthias Felleisen.
How to Evaluate the Performance of Gradual Type Systems

Conference, Symposium, and Hybrid Conference / Journal

- Ben Greenman

 PLDI 2022

 Deep and Shallow Types for Gradual Languages
- Ben Greenman, Lukas Lazarek, Christos Dimoulas, and Matthias Felleisen Programming 2022

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

 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. 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 Little Tricky Logic: Misconceptions in the Understanding of LTL	2022
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	

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• Bootstrap Professional Development Teaching Assistant

Summer 2021

• Housing Chair • Northeastern CCIS Hiring Committee Spring 2018 Student Representative • PRL Offsite Fall 2019 Organizer • Each One Teach One Fall 2015 AP Java Tutor OOPSLA 2019; Turing Celebration 2017; POPL 2016, 2018; • Student Volunteer PLDI 2016; ICFP 2015, 2018; ECOOP 2015, 2016 • Ithaca Media Arts Summer 2012 Teacher, LEGO Mindstorms Camp • Cornell Math Explorers Winter 2011

Module Designer

SPLASH 2018