Benjamin Lee 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

- Brown University 2021 – ongoing
  Postdoctoral Researcher, CIFellows 2020

- Knightsbridge Park 2017
  Consultant, Web Scraping

- Cornell University 2012 – 2014
  Research Assistant
Rentenna Inc. 2012 – 2014
Software Engineering Intern

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

• Qianfan Chen 2020 – ongoing
  Sc.B., Brown University

• Kuang-Chen Lu 2020 – ongoing
  Ph.D., Brown University

• Milo Davis 2017
  B.S., Northeastern University

• Zeina Migeed 2016 – 2017
  B.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

PROFESSIONAL SERVICE


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

Conference, Symposium, and Hybrid Conference / Journal

• Ben Greenman, Lukas Lazarek, Christos Dimoulas, and Matthias Felleisen
  A Transient Semantics for Typed Racket
  Programming 2022

• Kuang-Chen Lu, Ben Greenman, and Shriram Krishnamurthi
  Types for Tables: A Language Design Benchmark
  Programming 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**

• 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  
Spring 2018

• Northeastern CCIS Hiring Committee  
Student Representative  
SPLASH 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