Benjamin Lee Greenman

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Research Interests

Migratory Typing, Language Design, Type Theory, Constructions

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

- Quianfan Chen   2020 – ongoing
  B.S., 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
- Reviewer   JFP Special Issue on Gradual Typing
- Artifact Evaluation Committee   ECOOP 2017
- Artifact Evaluation Committee   OOPSLA 2017

- Artifact Evaluation Committee OOPSLA 2016

Volunteering

- 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

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, 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 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, OOPSLA 2018
  and Vincent St. Amour.
  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,   SNAPL 2017
  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.   POPL 2017
  Type Systems as Macros

- Asumu Takikawa, Daniel Feltey, Ben Greenman, Max S. New, Jan Vitek,   POPL 2016
  and Matthias Felleisen.
  Is Sound Gradual Typing Dead?

- Ben Greenman, Fabian Muehlboeck, and Ross Tate.   PLDI 2014
  Getting F-Bounded Polymorphism into Shape

Workshop

- Asumu Takikawa, Daniel Feltey, Ben Greenman, Max S. New, Jan Vitek,   STOP 2015
  and Matthias Felleisen.
  Position Paper: Performance Evaluation for Gradual Typing

Invited Talks

- Racket Con   2020
  Shallow Typed Racket

- Boston University POPV Seminar   2020
  Complete Monitoring for Gradual Types

- GRACE Workshop   2018
  Three Approaches to Gradual Typing