Benjamin Lee Greenman

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RESEARCH INTERESTS _

General interests: Language design issues regarding proofs, performance, and people. What guarantees does the language offer, how efficiently does it run, and to what extent does it support users' goals?

| Specific interests: Migratory Typing, Multi-Language Systems, Data Visualization, Type Theory | | | |
|---|---------------------------------------|----------------|--|
| Education | | | |
| Northeast | tern University | 2014 - 2020 | |
| Degree | Ph.D | | |
| Area | Programming Languages | | |
| Advisor | Matthias Felleisen | | |
| Thesis | Deep and Shallow Types | | |
| • Cornell U | ornell University 20 | | |
| Degree | · · · · · · · · · · · · · · · · · · · | | |
| Major | Computer Science | | |
| Advisor | Ross Tate | | |
| • Cornell U | niversity | 2010 - 2013 | |
| | Bachelor of Science | | |
| Major | Industrial and Labor Relations | | |
| Minor | Computer Science | | |
| | alley Community College | 2009 - 2010 | |
| General | Studies | | |
| | | | |
| EMPLOYMENT | | | |
| Brown University | | 2021 – ongoing | |
| Postdoctoral Researcher, CIFellows 2020 | | | |
| Knightsbi | ridge Park | 2017 | |
| Consultar | nt, Web Scraping | | |
| • Cornell U | niversity | 2012 - 2014 | |

Research Assistant

| 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 | |
| Qianfan Chen Sc.B., Brown University | 2020 – ongoing |
| Kuang-Chen Lu Ph.D., Brown University | 2020 – ongoing |
| • Milo Davis B.S., Northeastern University | 2017 |
| • Zeina Migeed B.S., Northeastern University | 2016 – 2017 |
| 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 | |

2012 - 2014

• Rentenna Inc.

| 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

Conference, Symposium, and Hybrid Conference / Journal

On the Cost of Type-Tag Soundness

• 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

| • Stephen Chang, Ben Greenman, and A Type Systems as Macros | lex Knauth. | POPL 2 |
|---|---|----------|
| Asumu Takikawa, Daniel Feltey, Ben G and Matthias Felleisen. Is Sound Gradual Typing Dead? | Greenman, Max S. New, Jan Vitek, | POPL 2 |
| • Ben Greenman, Fabian Muehlboeck, ar Getting F-Bounded Polymorphism into S | | PLDI 2 |
| Workshop | | |
| Asumu Takikawa, Daniel Feltey, Ben Cand Matthias Felleisen. Position Paper: Performance Evaluation | | STOP 2 |
| Invited Talks | | |
| • Racket Con Shallow Typed Racket | | 2 |
| Boston University POPV Seminar Complete Monitoring for Gradual Types | | 2 |
| • GRACE Workshop Three Approaches to Gradual Typing | | 2 |
| Volunteering | | |
| • Bootstrap Professional Development Teaching Assistant | | Summer 2 |
| Housing Chair | | SPLASH 2 |
| • Northeastern CCIS Hiring Committee Student Representative | | Spring 2 |
| • PRL Offsite Organizer | | Fall 2 |
| • Each One Teach One AP Java Tutor | | Fall 2 |
| • Student Volunteer | OOPSLA 2019; Turing Celebration 201 PLDI 2016; ICFP 2015, 2018 | |
| • Ithaca Media Arts Teacher, LEGO Mindstorms Camp | | Summer 2 |
| Cornell Math Explorers Module Designer | | Winter 2 |