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RESEARCH INTERESTS Language interoperability; gradual typing; language semantics and design

CURRENT POSITION ◇ Northeastern University (Boston, MA, USA) *Aug. 2014 – Present*
 PhD Candidate

EDUCATION **Northeastern University**, Boston, MA *2012 – 2018*
 PhD in Computer Science, *Expected April, 2020*
 Thesis: *A Semantic Foundation for Gradual Typing*
 Advisor: Amal Ahmed
 Committee: Matthias Felleisen, Ronald Garcia, Daniel R. Licata, Peter Thiemann, Mitchell Wand

Northwestern University, Evanston, IL *2009 – 2014*
 MS in Computer Science, *June 2014*
 BA in Computer Science and Mathematics, *June 2013*

PROFESSIONAL ACTIVITIES AND SERVICE **Program Co-chair** *April 2020*
 Eighth Workshop on Mathematically Structured Functional Programming (MSFP 2020)

Invited Participant *May 2018*
 Dagstuhl Seminar 18201: Secure Compilation

Invited Participant *May 2018*
 Shonan Meeting No. 146: Programming and Reasoning with Algebraic Effects and Effect Handlers

Panelist *January 2019*
 Programming Languages Mentoring Workshop at POPL 2019
 Panel: Grad School and Beyond

New England Programming Languages and Systems Symposium
Co-chair October 2016
Selection Committee May 2016, June 2017, October 2016, August 2018

Journal Reviewer for: ACM Transactions on Programming Languages and Systems (TOPLAS), Journal of Functional Programming (JFP), Logical Methods in Computer Science (LMCS),)

Conference Reviewer for ACM SIGPLAN Symposium on Principles of Programming Languages (POPL), ACM–IEEE Symposium on Logic in Computer Science (LICS), ACM SIGPLAN International Conference on Functional Programming (ICFP), International Conference on Foundations of Software Science and Computation Structures (FoSSaCS)

AWARDS POPL Student Research Competition, Third Place *2017*
 Northeastern University Fellowship *2014 – Present*

PUBLICATIONS (JOURNAL)	<p>How to evaluate the performance of gradual type systems <i>JFP Vol 29, 2019</i> Ben Greenman, Asumu Takikawa, Max S. New, Daniel Feltey, Robert Bruce Findler, Jan Vitek, Matthias Felleisen <i>Journal of Functional Programming</i></p> <p>Fair Enumeration Combinators <i>JFP Vol 27, 2017</i> Max S. New, Burke Fetscher, Robert Bruce Findler, Jay McCarthy <i>Journal of Functional Programming</i></p>
PUBLICATIONS (CONFERENCES)	<p>Graduality and Parametricity: Together Again for the First Time <i>POPL 2020</i> Max S. New, Dustin Jamner, Amal Ahmed <i>ACM SIGPLAN Symposium on Principles of Programming Languages</i></p> <p>Gradual Type Theory <i>POPL 2019</i> Max S. New, Daniel R. Licata, Amal Ahmed <i>ACM SIGPLAN Symposium on Principles of Programming Languages</i></p> <p>Graduality from Embedding-projection Pairs <i>ICFP 2018</i> Max S. New, Amal Ahmed <i>ACM SIGPLAN International Conference on Functional Programming</i></p> <p>Call-by-name Gradual Type Theory <i>FSCD 2018</i> Max S. New, Daniel R. Licata <i>International Conference on Formal Structures for Computation and Deduction</i></p> <p>FabULous Interoperability for ML and a Linear Language <i>FoSSaCS 2018</i> Gabriel Scherer, Max S. New, Nick Rioux and Amal Ahmed <i>International Conference on Foundations of Software Science and Computation Structures</i></p> <p>Fully Abstract Compilation via Universal Embedding <i>ICFP 2017</i> Max S. New, William J. Bowman, and Amal Ahmed <i>ACM SIGPLAN International Conference on Functional Programming</i></p> <p>Oh Lord, Please Don't Let Contracts be Misunderstood (Functional Pearl) <i>ICFP 2016</i> Christos Dimoulas, Max S. New, Robert Bruce Findler, Matthias Felleisen <i>ACM SIGPLAN International Conference on Functional Programming</i></p> <p>A Coq Library For Internal Verification of Running-Times <i>FLOPS 2016</i> Jay McCarthy, Burke Fetscher, Max New, Daniel Feltey, Robert Bruce Findler <i>International Symposium on Functional and Logic Programming</i></p> <p>Is Sound Gradual Typing Dead? <i>POPL 2016</i> Asumu Takikawa, Daniel Feltey, Ben Greenman, Max S. New, Jan Vitek, Matthias Felleisen <i>ACM SIGPLAN Symposium on Principles of Programming Languages</i></p>

TEACHING EXPERIENCE	Northeastern University	
	◊ Teaching assistant, <i>Intensive Principles of Programming Languages</i> PhD course on programming languages	<i>Spring 2016</i>
	◊ Teaching Assistant, <i>Fundamentals of Computer Science I</i> Undergraduate introductory programming course	<i>Fall 2015</i>
	Northwestern University	
	◊ Teaching Assistant, <i>Compiler Construction</i> Upper-level undergraduate course on compilers	<i>Spring 2014</i>
	◊ Teaching Assistant, <i>Programming Languages</i> Undergraduate course on programming languages	<i>Winter 2014</i>
TALKS	Type Theoretic Gradual Typing	<i>June 2019</i>
	UPenn PL Club	
	A Type Theoretic Approach to Gradual Typing	<i>October 2018</i>
	CMU Principles of Programming Seminar	
	Semantic Foundations for Gradual Typing	<i>June 2018</i>
	Invited Talk, MFPS 2018	
	Call-by-name Gradual Type Theory	<i>April 2018</i>
	Northeastern PL Seminar	
	Retractions and Blame	<i>December 2016</i>
	Northeastern PL Seminar	
Abstract Interpretation	<i>February 2016</i>	
Northeastern PL Seminar, Jr		
The Expression Problem & Inductive Data Types	<i>July 2015</i>	
Northeastern PL Seminar, Jr		
System F and Parametricity	<i>March 2015</i>	
Northeastern PL Seminar, Jr		
Intro to Categories	<i>November 2014</i>	
Northeastern PL Seminar, Jr		
Every Program in Your Redex Model, in Order	<i>September 2013</i>	
RacketCon 2013		