

**Email:** maxsnew@gmail.com  
**Web:** https://maxsnew.com  
**Phone:** +1 985 397 1770

RESEARCH INTERESTS	Language interoperability; gradual typing; language semantics and design	
CURRENT POSITION	◇ Northeastern University (Boston, MA, USA) PhD Candidate	Aug. 2014 – Present
EDUCATION	<b>Northeastern University</b> , Boston, MA PhD in Computer Science, <i>Expected April, 2020</i> Thesis: <i>A Semantic Foundation for Gradual Typing</i> Advisor: Amal Ahmed Committee: Matthias Felleisen, Ronald Garcia, Daniel R. Licata, Peter Thiemann, Mitchell Wand  <b>Northwestern University</b> , Evanston, IL MS in Computer Science, <i>June 2014</i> BA in Computer Science and Mathematics, <i>June 2013</i>	2012 – 2018           2009 – 2014
SERVICE	<b>Co-chair</b> Eighth Workshop on Mathematically Structured Functional Programming (MSFP 2020)  <b>Panelist</b> Programming Languages Mentoring Workshop Panel: Grad School and Beyond  New England Programming Languages and Systems Symposium <b>Co-chair October 2016</b> <b>Selection Committee May 2016, June 2017, August 2018</b>  <b>Reviewer</b> for: FoSSaCS, ICFP, JFP, LNCS, LICS, POPL, TOPLAS	April 2020           January 2019
AWARDS	POPL Student Research Competition, Third Place Northeastern University Fellowship	2017 2014 – Present
PUBLICATIONS (JOURNAL)	<b>How to evaluate the performance of gradual type systems</b> Ben Greenman, Asumu Takikawa, Max S. New, Daniel Feltey, Robert Bruce Findler, Jan Vitek, Matthias Felleisen <i>Journal of Functional Programming</i>  <b>Fair Enumeration Combinators</b> Max S. New, Burke Fetscher, Robert Bruce Findler, Jay McCarthy <i>Journal of Functional Programming</i>	<i>JFP Vol 29, 2019</i>        <i>JFP Vol 27, 2017</i>

PUBLICATIONS (CONFERENCES)	<b>Graduality and Parametricity: Together Again for the First Time</b>	<i>POPL 2020</i>
	Max S. New, Dustin Jamner, Amal Ahmed <i>ACM SIGPLAN Symposium on Principles of Programming Languages</i>	
	<b>Gradual Type Theory</b>	<i>POPL 2019</i>
	Max S. New, Daniel R. Licata, Amal Ahmed <i>ACM SIGPLAN Symposium on Principles of Programming Languages</i>	
	<b>Graduality from Embedding-projection Pairs</b>	<i>ICFP 2018</i>
	Max S. New, Amal Ahmed <i>ACM SIGPLAN International Conference on Functional Programming</i>	
	<b>Call-by-name Gradual Type Theory</b>	<i>FSCD 2018</i>
	Max S. New, Daniel R. Licata <i>International Conference on Formal Structures for Computation and Deduction</i>	
	<b>Fully Abstract Compilation via Universal Embedding</b>	<i>ICFP 2017</i>
	Max S. New, William J. Bowman, and Amal Ahmed <i>ACM SIGPLAN International Conference on Functional Programming</i>	
	<b>Oh Lord, Please Don't Let Contracts be Misunderstood (Functional Pearl)</b>	<i>ICFP 2016</i>
	Christos Dimoulas, Max S. New, Robert Bruce Findler, Matthias Felleisen <i>ACM SIGPLAN International Conference on Functional Programming</i>	
	<b>A Coq Library For Internal Verification of Running-Times</b>	<i>FLOPS 2016</i>
	Jay McCarthy, Burke Fetscher, Max New, Daniel Feltey, Robert Bruce Findler <i>International Symposium on Functional and Logic Programming</i>	
	<b>Is Sound Gradual Typing Dead?</b>	<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>	
TEACHING EXPERIENCE	<b>Northeastern University</b>	
	◊ 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>
	<b>Northwestern University</b>	
	◊ 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	<b>Type Theoretic Gradual Typing</b> UPenn PL Club	<i>June 2019</i>
	<b>A Type Theoretic Approach to Gradual Typing</b> CMU Principles of Programming Seminar	<i>October 2018</i>
	<b>Semantic Foundations for Gradual Typing</b> Invited Talk, MFPS 2018	<i>June 2018</i>
	<b>Call-by-name Gradual Type Theory</b> Northeastern PL Seminar	<i>April 2018</i>
	<b>Retractions and Blame</b> Northeastern PL Seminar	<i>December 2016</i>
	<b>Abstract Interpretation</b> Northeastern PL Seminar, Jr	<i>February 2016</i>
	<b>The Expression Problem &amp; Inductive Data Types</b> Northeastern PL Seminar, Jr	<i>July 2015</i>
	<b>System F and Parametricity</b> Northeastern PL Seminar, Jr	<i>March 2015</i>
	<b>Intro to Categories</b> Northeastern PL Seminar, Jr	<i>November 2014</i>
	<b>Every Program in Your Redex Model, in Order</b> RacketCon 2013	<i>September 2013</i>