

Jesse A. Tov

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Interests

Programming languages, programming pedagogy, practical language design, type systems, part-time programmers

Appointments

- 2014–2015 *Lecturer*, CCIS, Northeastern University
- 2014 *Lecturer on Computer Science*, SEAS, Harvard University
- 2012–2014 *Postdoctoral Fellow*, SEAS, Harvard University
- 2005–2007, 2011 *Research Assistant*, CCIS, Northeastern University
- 2007–2010 *Teaching Assistant*, CCIS, Northeastern University
- 2004–2007 *Teaching Fellow*, DEAS, Harvard University

Education

- 2005–2012 PH.D. in Computer Science, Northeastern University
Thesis title: *Practical Programming with Substructural Types*
Advisor: Riccardo Pucella
Committee: Matthias Felleisen, Matthew Fluet, Mitchell Wand
- 2005–2007 M.S. in Computer Science, Northeastern University
- 1999–2003 A.B. *cum laude* in Computer Science, Harvard College

Publications & Talks

CONFERENCES

- 2013 Silviu Chiricescu, André DeHon, Delphine Demange, Suraj Iyer, Aleksey Kliger, Greg Morrisett, Benjamin C. Pierce, Howard Reubenstein, Jonathan M. Smith, Gregory T. Sullivan, Arun Thomas, **Jesse Tov**, Christopher M. White, and David Wittenberg. [SAFE: A Clean-Slate Architecture for Secure Systems](#) In *Proc. IEEE International Conference on Technologies for Homeland Security (HST)*.
- 2011 **Jesse A. Tov** and Riccardo Pucella. [A Theory of Substructural Types and Control](#). In *Proc. ACM International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA)*.
Jesse A. Tov and Riccardo Pucella. [Practical Affine Types](#). In *Proc. 38th ACM Symposium on Principles of Programming Languages (POPL)*.

- 2010 **Jesse A. Tov** and Riccardo Pucella. [Stateful Contracts for Affine Types](#). In *Proc. 19th European Symposium on Programming (ESOP)*.
- 2008 Riccardo Pucella and **Jesse A. Tov**. [Haskell Session Types With \(Almost\) No Class](#). In *Proc. 1st ACM SIGPLAN Symposium on Haskell*.

WORKSHOPS

- 2014 Edward Gan, **Jesse A. Tov**, and Greg Morrisett. [Type Classes for Lightweight Substructural Types](#). In *Proc. Third International Workshop on Linearity*.
- 2012 **Jesse A. Tov** and Elizabeth J. Tov. [Taking Part-Time Programmers Seriously](#). In *Off the Beaten Track: Underrepresented Problems for Programming Language Researchers*.
- 2008 Alec Heller and **Jesse A. Tov**. [Caml-Shcaml: An OCaml Library for Unix Shell Programming](#). In *Proc. ACM SIGPLAN Workshop on ML*.

SELECTED TALKS

- 2013 [Tempest: A Low-Level Language For a SAFE Machine](#). New Jersey Programming Languages and Systems Seminar (NJPLS), November 15, 2013.
- 2012 Practical Programming with Affine Types. Mozilla, July 19, 2012.
 Practical Programming with Affine Types. Quora, July 17, 2012.
 Practical Programming with Affine Types. Stanford Software Seminar, July 16, 2012.
- 2011 A Theory of Substructural Types and Control. Harvard University PL Seminar, October 19, 2011.
[Implicit Arrow Annotations in Alms](#). New England Programming Languages and Systems Symposium (NEPLS), March 4, 2011.
- 2009 [A Model of Functional Traversal-Based Generic Programming](#) (on behalf of Bryan Chadwich and Karl Lieberherr). Symposium in Honor of Mitchell Wand, August 23, 2009.

Teaching

COURSES TAUGHT

- 2015 “Building Extensible Systems,” co-instructor with Matthias Felleisen
 Northeastern University, (14 students)
 “Object-Oriented Design,” Northeastern University (97 students)
- 2014 “Object-Oriented Design,” Northeastern University (143 students in two sections)
 “Introduction to Computer Science II,” Harvard University (333 students)
- 2010 “Fundamentals of Computer Science I,” Northeastern University (44 students)
- 2008 “Compilers,” Northeastern University (8 students)

OTHER TEACHING EXPERIENCE

- 2007–2010 Teaching Assistant, “Principles of Programming Languages” (2007), “Logic and Computation” (2009), “Fundamentals of Computer Science I” (2009), “Program Design Paradigms” (2008, 2010), Northeastern University
- 2004–2007 Teaching Fellow, “Introduction to Computer Science II” (2004, 2005, 2007), Harvard University

Additional Work Experience

- 2006 Intern, Fleet Numerical Meteorology and Oceanography Center
- 2005 Founder, Simmery Axe (Y-Combinator-funded startup), Cambridge, Mass.
- 2004 Software Engineer, NexPlan, Redwood City, Calif.
- 2004 Junior Developer, ActBlue, Cambridge, Mass.
- 2001–2004 New Media Manager, Let’s Go Publications, Cambridge, Mass.
- 2001 Junior Systems Administrator, Harvard University EECS, Cambridge, Mass.
- 2000–2002 Web Intern, Harvard University Freshman Dean’s Office, Cambridge, Mass.
- 2000 Technical Support Intern, EMUmail, Cambridge, Mass.

Awards

- 2009 Teaching Award, College of Computer and Information Science Graduate School, Northeastern University
- 2007 Certificate of Distinction in Teaching, Derek Bok Center for Teaching and Learning, Harvard University

Professional Service

PROGRAM COMMITTEE MEMBER

- 2014 International Conference on Functional Programming (ICFP)
- 2013 ML Workshop

REVIEWER

- 2015 *New Generation Computing*
- 2014 *Journal of Functional Programming*
- 2013 European Symposium on Programming (ESOP)
- 2012 Conference on Interactive Theorem Proving (ITP)
- International Conference on Availability, Reliability, and Security (ARES)
- Conference on Object-Oriented Programming, Systems, Languages & Applications (OOPSLA)
- 2010 Symposium on Trends in Functional Programming (TFP)
- 2009 Haskell Symposium
- 2008 International Conference on Functional Programming (ICFP)