# JUSTIN POMBRIO
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| Mailing Address | Permanent Address |
|---|---|
| 146 Governor Street | 17 Dougans Alley |
| Providence, RI, 02906 | Manchester, CT 06040 |

**Research Interests** Programming languages, with an emphasis on syntactic sugar

**Education**

**Brown University**, Providence, RI
Working towards a PhD in Computer Science  *June 2012 - Present*
Masters in Computer Science  *May 2014*
GPA 4.00

**Worcester Polytechnic Institute**, Worcester, MA  *May 2011*
Bachelor of Science in Computer Science
Bachelor of Science in Mathematical Science
GPA 3.87

**Publications**

Slimming Languages by Reducing Sugar:  *Onward! 2015*
A Case for Semantics-Altering Transformations
Junsong Li, *Justin Pombrio*, Joe Gibbs Politz, Shriram Krishnamurthi

Hygienic Resugaring of Compositional Desugaring  *ICFP 2015*
*Justin Pombrio*, Shriram Krishnamurthi

Resugaring: Lifting Evaluation Sequences through Syntactic Sugar  *PLDI 2014*
*Justin Pombrio*, Shriram Krishnamurthi

A Tested Semantics forGetters, Setters, and Eval in JavaScript  *DLS 2012*
Joe Gibbs Politz, Matt Carroll, Benjamin S. Lerner,
*Justin Pombrio*, Shriram Krishnamurthi

**Experience**

**Graduate TA for PL Course**, Brown  *Fall 2013, Fall 2014, Fall 2015*
I constructed the programming assignments for the course and automated their grading. These assignments are the majority of the students' coursework; there are no exams. We grade both code and test cases. Automatically grading test cases is an interesting challenge: ask me about it.

**Kayak**, Concord, MA  *June 2011 – June 2012*
Kayak is a travel search engine. I worked on the Kayak Network advertising team. Most of my contributions were back-end improvements and features for KN's account managers. My most significant project was to redesign their ad management framework.

**Major Qualifying Project**, WPI  *March 2010 – May 2011*
The Strand Space Formalism is a mathematical model, developed at MITRE, that is used to reason about cryptographic protocols. It may, for instance, be used to prove the correctness of the Transport Layer Security (TLS) protocol. My research project, led by Professors Daniel Dougherty and Joshua Guttman, involved expressing the Strand Space Formalism in first order logic. An algorithm called the Chase can then be used to verify cryptographic protocols.

**Chitika**, Marlborough, MA  *May – Aug 2008*
Chitika is a small internet advertising company. My contributions included automating click-fraud detection and writing a script to distribute computation across Amazon EC2 instances.

**Conference Talks:** PLDI'14, ICFP'15, Onward'15, NEPLS'15

**Artifact Evaluation Committee Reviewer**: PLDI'16

**Skills**

| | Languages | Tools |
|---|---|---|
| **Expert** | Haskell, Racket, Python, Java | Emacs, LaTeX |
| **Novice** | Javascript, Rust, C, SQL, Ocaml, Bash | Eclipse |