

Daniel Patterson

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SUMMARY PhD candidate (programming languages).

ACADEMIC PUBLICATIONS *Rust Distilled: An Expressive Tower of Languages.*
• Aaron Weiss, Daniel Patterson, and Amal Ahmed. ML 2018.
FunTAL: Reasonably Mixing a Functional Language with Assembly.
• Daniel Patterson, Jamie Perconti, Christos Dimoulas, and Amal Ahmed. PLDI 2017.
Linking Types for Multi-Language Software: Have Your Cake and Eat It Too.
• Daniel Patterson and Amal Ahmed. SNAPL 2017.
CaptainTeach: Multi-Stage, In-Flow Peer Review for Programming Assignments.
• Joe Gibbs Politz, Daniel Patterson, Kathi Fisler, and Shriram Krishnamurthi. ITiCSE 2014.
Python: The Full Monty - A Tested Semantics for the Python Programming Language.
• Joe Gibbs Politz, Alejandro Martinez, Matthew Milano, Sumner Warren, Daniel Patterson, Junsong Li, Anand Chitipothu, and Shriram Krishnamurthi. OOP-SLA 2013.

ACADEMIC SERVICE 22nd International Conference on Functional Programming (ICFP 2017).
• *External Reviewer*
46th Symposium on Principles of Programming Languages (POPL 2019).
• *External Reviewer*
• *Artifact Evaluation Committee Member*
40th Conference on Programming Language Design and Implementation (PLDI 2019)
• *Artifact Evaluation Committee Member*

TEACHING EXPERIENCE • Head TA for *Fundamentals of CS* (CS2500) at Northeastern.
• Head TA for *Probability and Computation* (CS155) at Brown.
• TA for *Introduction to Probability and Computing* (CS45) at Brown.

INDUSTRY EXPERIENCE *Founder, Position Development - Haskell, Ruby* 2014-2016
Media, Publishing, Non-Profits
• Founded consulting business (positiondev.com) doing web development in Haskell and Ruby. Built ecommerce stores, subscription systems, paywalls, mailing lists.
Contractor - OCaml, Amazon AWS Spring 2015
Cloud Orchestration - Inhabited Type
• Built foundational libraries and implementations for a declarative language-based cloud orchestration startup.

AWARDS *National Science Foundation, GRFP 2018* Honorable Mention

EDUCATION *Ph.D.*, Computer Science (ongoing)
Northeastern University, Boston MA

Bachelor of Science, Math and Computer Science
Brown University, Providence RI