

DANIEL PERELMAN

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Education

- **University of Washington**—Seattle, WA (*Ph.D. in Computer Science and Engineering*)
 - Advisors: Dan Grossman and Sumit Gulwani (Microsoft Research)
 - Thesis: *Program Synthesis Without Full Specifications for Novel Applications*
 - Graduated June 2015
- **Cornell University College of Arts & Sciences**—Ithaca, NY (*B.A. Computer Science and Mathematics*)
 - GPA: 3.8 (overall), 4.1 (CS major), 4.0 (Math major)
 - Graduated May 2010

Experience

- **Microsoft**—Redmond, WA (*Research Software Engineer: July 2015–present*)
 - Worked on PROSE (PROgram Synthesis using Examples) team developing program synthesis algorithms and performing engineering work to productize them.
- **Automating Grading**—research with Sumit Gulwani, Judith Bishop, Dan Grossman (2014–2015)
 - Used TDS technology to create hint system for programming game CodeHunt (<https://www.codehunt.com/>).
- **Test-Driven Synthesis**—research with Sumit Gulwani, Dan Grossman (2012–2015)
 - Developed theory and implementation of a general-purpose program synthesis technique inspired by Test Driven Development.
 - First author on paper in top conference, PLDI 2014
- **Code completion**—research with Sumit Gulwani, Thomas Ball, Dan Grossman (2010–2012)
 - Developed partial expressions language for API discovery.
 - Implemented Visual Studio plug-in for using partial expressions for API discovery in real projects (<https://pec.codeplex.com/>).
 - First author on paper in top conference, PLDI 2012
- **YouRenew.com**—New Haven, CT (*Web Programmer: February 2009–August 2009*)
 - Worked on backend for checkout system and contact forms.
 - Deployed Apache Solr search server to improve searching of YouRenew.com product catalog.
- **Times Microwave Systems**—Wallingford, CT (*Web Programmer: February 2006–September 2008*)
 - Designed and developed and modified multiple intranet web applications to reduce paperwork and expedite collaboration between departments.
 - Developed web applications for tracking items in production on factory floor.
 - Met with users and designed applications and interfaces based on their needs.

Teaching Experience

- Worked as a teaching assistant in many computer science courses at Cornell University and University of Washington where duties included grading, teaching section, and holding office hours.

Skills

- **Languages:** C#, Java, Python, Haskell, OCaml, Bash, PHP, Javascript, Scala, C++, C, assembly (x86, ARM, 65c816)
- **Technologies:** Azure, MySQL, PostgreSQL, Django, Apache, IIS, \LaTeX , Git, Mercurial, Subversion