

## Daniel Patterson

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<b>SUMMARY</b>	Backend engineer with seven years experience writing full-stack web applications, setting up processing daemons, and managing deployment. Experienced with Ruby (and Rails), Haskell (Snap), OCaml, Python, Postgresql, Redis and Docker. A committer to Snap, a Haskell web framework.
<b>WORK EXPERIENCE</b>	<div><div><i>Lead Developer - Haskell, Snap, Postgresql, Redis.</i>2014</div><div>Research Project<ul style="list-style-type: none"><li>Interactive tool for people 70+ to plan their lives, as part of a research study at Northwestern University. Followed extensive usability guidelines, while making interactivity suitable for technically unsophisticated users</li></ul></div><div><div><i>Lead Developer - Haskell, PHP, Snap, Wordpress, Postgresql, Stripe.</i>2013-2014</div><div>Paywall / Subscriptions System<ul style="list-style-type: none"><li>Paywall, subscription fulfillment system and mailing list for Jacobin Magazine, integrated into existing Wordpress site. Deployment with Ansible/Docker.</li></ul></div><div><div><i>Various Development - Python, OCaml, Ruby, Haskell, Snap, Postgresql.</i>2007-2014</div><div>Freelance<ul style="list-style-type: none"><li>Digital music store for a small recording studio, payment processing with Paypal.</li><li>Application for students to upload and analyze information about food consumption at their universities, built for the non-profit Real Food Challenge.</li></ul></div><div><div><i>Engineering Intern - PHP, Python, C.</i>Summer 2007</div><div>Facebook, Palo Alto<ul style="list-style-type: none"><li>Worked on internal tools, and an experimental PHP to Python bridge to allow new code to be written in Python (before PHP to C++ compiler was written).</li></ul></div></div></div></div></div>
<b>RESEARCH EXPERIENCE</b>	<div><div><i>Developer - CaptainTeach</i>2013</div><div>Online IDE and Prototype Education Platform<ul style="list-style-type: none"><li>Built an online IDE for programming assignments, built on top of the Pyret Programming Language, with multi-stage assignments and interactive material.</li></ul></div><div><div><i>Codesigner - Pyret Programming Language - pyret.org.</i>2012-2013</div><div>Language Design<ul style="list-style-type: none"><li>Lead designer, along with Joe Politz, of an education focused programming language at Brown University. Was partly or fully responsible for all of the core language features and the initial implementation.</li></ul></div></div></div>
<b>SKILLS</b>	<i>Haskell, SQL, Ruby, Python, OCaml, C, C++, x86, Java, Linux, Git, Ansible, Docker.</i>
<b>PUBLICATIONS</b>	<ul style="list-style-type: none"><li><i>CaptainTeach: Multi-Stage, In-Flow Peer Review for Programming Assignments.</i> Joe Gibbs Politz, Daniel Patterson, Kathi Fisler, and Shriram Krishnamurthi. ITiCSE 2014.</li><li><i>Python: The Full Monty - A Tested Semantics for the Python Programming Language.</i> Joe Gibbs Politz, Alejandro Martinez, Matthew Milano, Sumner Warren, Daniel Patterson, Junsong Li, Anand Chitipothu, and Shriram Krishnamurthi. OOPSLA 2013.</li></ul>
<b>EDUCATION</b>	<i>Bachelor of Science, Math and Computer Science</i> Brown University, Providence RI