## Philip Reames

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| Objective                           | <b>I am not currently looking for a new role</b> . Generally, my preference when it comes to full time positions is for positions in the bay area, at smaller firms, and that involve hard technical challenges. I am open to technical consulting oppurtunities, but with one key exception - I choose not to be involved in patent cases.                                                                                                                                                                                                                                                                                                                                               |
| Education                           | Masters of Science, Computer Science and Electrical Engineering,<br>University of California Berkeley, Expected May 2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                     | Bachelor of Science, Computer Science with International Minor in Japanese Studies.<br>University of Illinois Urbana-Champaign. May 2007                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Relevant<br>Experience              | <ul> <li>Graduate Student Researcher University of California Berkeley 2011-Current</li> <li>I am advised by Professor George Necula and am part of the Parallel Computing Laboratory. My projects have focused around intersections between native and managed languages in particular runtime support for low level code in a partially managed environment. In addition to the publications below, I have spent time working on event based systems, cross language compiler optimizations, and program synthesis.</li> </ul>                                                                                                                                                          |
|                                     | <ul> <li>Research Intern National Instruments, Austin, TX Summer 2012</li> <li>I was advised by co-founder and NI Business and Technology Fellow Jeff Kodosky. I investigated language and compiler changes to support 3rd party extensions of LabView programming environment. Target extensions included dynamic instrumentation and hybrid (mixed static/dynamic) error checkers.</li> </ul>                                                                                                                                                                                                                                                                                           |
|                                     | <ul> <li>Senior Software Engineer FactSet Research Systems Inc 2007-2011</li> <li>At FactSet, I started as a software engineer, moved into a technical lead role, and then ended by managing a team of six full-time engineers and two interns. My responsibilities included overseeing ongoing projects, personnel management, and product planning. As a Senior Software Engineer, I contributed code on a regular basis for my product responsibilities and across the company's core infrastructure.</li> <li>Please note that I am not seeking a management role. My strengths and interests are in software development, engineering process, and software architecture.</li> </ul> |
|                                     | <ul> <li>Undergraduate Research Assistant University of Illinois Urbana-Champaign 2006-2007</li> <li>My adviser was Professor Roy Campbell and I was part of the System Software Research Group. My project was a small paravirtualized hypervisor/operating system demonstrator on the ARM v5 architecture - which is described in my senior thesis listed below.</li> </ul>                                                                                                                                                                                                                                                                                                             |
| Publications                        | Philip Reames, George Necula. Towards Hinted Collection: Annotations for decreasing garbage collector pause times. <i>International Symposium on Memory Management 2013</i> , Seattle, WA, June 2013 (to appear)                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                     | Martin Maas, Philip Reames, Jeffrey Morlan, Krste Asanovic, Anthony D. Joseph, John Kubia-<br>towicz. GPUs as an Opportunity for Offloading Garbage Collection. <i>International Symposium</i><br><i>on Memory Management 2012</i> , Beijing, China, June 2012                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                     | Francis M. David, Jeffrey C. Carlyle, Ellick M. Chan, Philip A. Reames, and Roy H. Campbell.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|                    | Improving Dependability by Revisiting Operating System Design. <i>Proceedings of Workshop on Hot Topics in Dependability</i> , June 2007                                                                                                                                                                                                                                                        | of the 3rd                           |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
|                    | Rishi Bhardwaj, Phillip Reames, Russell Greenspan, Vijay Srinivas Nori, and Ercar<br>Choices Hypervisor on the ARM Architecture. <i>Technical Report, University of Illin</i><br>2006                                                                                                                                                                                                           | n Ucan. A<br><i>aois</i> , April     |
|                    | Philip Reames, Ellick Chan, Francis David, Jeffrey Carlyle and Roy Campbell. A H<br>for Embedded Computing. <i>Illinois Journal for Undergraduate Research</i> ; Spring 200                                                                                                                                                                                                                     | Iypervisor<br>)7                     |
| Skills             | Currently, my core languages of choice are C++ & Python. I have previous experien ious levels of expertise) with several assembly languages, shell scripting languages, description languages, and functional programming languages. Picking up a new la tool is generally not a challenge.                                                                                                     | ce (at var-<br>hardware<br>nguage or |
|                    | I have experience (academic, practical, or both) with several frameworks for parallel ming including MPI, OpenMP, OpenCL, PThreads, and Futures.                                                                                                                                                                                                                                                | program-                             |
|                    | I have implemented reliability mechanisms (such as checkpoint-and-restart) in sev<br>production environments. I have implemented the core of an operating system from                                                                                                                                                                                                                           | eral batch<br>scratch.               |
|                    | I am currently prototyping tools and languages using combinations of the Clang/LL<br>RVM, and the Boehm-Weiser conservative collector frameworks.                                                                                                                                                                                                                                               | VM, Jikes                            |
| Awards &<br>Honors | Unsung Activist Award, Lavender Graduation. May 2007<br>University of Illinois Orange County Alumni Scholarship. August 2005<br>Undergraduate International Exchange Fellowship. May 2005<br>Unisys Rehart Scholarship. May 2003<br>California State Governor's Scholar Award. May 2003<br>International Baccalaureate (IB) Diploma, May 2003<br>Eagle Scout, Boy Scouts of America. April 2003 |                                      |
| Activities         | Member, Student Advisory Panel to the Vice Chancellor of Administration and Fina<br>University of California Berkeley                                                                                                                                                                                                                                                                           | nce<br>2012-2013                     |
|                    | Volunteer, Sylvia's Place Shelter, NYC 2                                                                                                                                                                                                                                                                                                                                                        | 2008-2010                            |
|                    | Member, Undergraduate Studies Committee<br>University of Illinois Urbana-Champaign 2                                                                                                                                                                                                                                                                                                            | 2006/2007                            |
|                    | Coordinator, Signature Verification Campaign & Executive Board Member<br>Equal Marriage Illinois Champaign County Surr                                                                                                                                                                                                                                                                          | nmer 2006                            |
|                    | Conference Chair, Illinois GLBT College Conference Sp                                                                                                                                                                                                                                                                                                                                           | oring 2006                           |
| Notes              | You may find my GitHub and LinkedIn profiles relevant. You are welcome to c<br>directly with any questions.                                                                                                                                                                                                                                                                                     | ontact me                            |
|                    | The most recent version of this document can always be found at:<br>http://www.philipreames.com/resume.pdf                                                                                                                                                                                                                                                                                      |                                      |
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References available on request.