

Tarun Prabhu

CONTACT	http://www.cs.illinois.edu/homes/tprabhu2	tprabhu2@illinois.edu
OBJECTIVE	Seeking a challenging internship in software development for the summer of 2011.	
EDUCATION	University of Illinois at Urbana-Champaign , Urbana, USA	Aug, 2010 – present
	PhD (Computer Science) [expected 2013]	
	University of Utah , Salt Lake City, USA	Aug, 2008 – Aug, 2010
	MS (Computer Science)	
	University of Mumbai (St.Francis Inst.of Tech.), Mumbai, India	Aug, 2003 – Jun, 2007
	BE (Computer Engineering)	
PROFESSIONAL EXPERIENCE	University of Utah , Salt Lake City, USA	Aug, 2008 – Aug, 2010
	<i>Research Assistant</i> , Flux Research Group	
	<ul style="list-style-type: none">• PROTOGENI : Adding XML support to Emulab, the networking testbed developed by the group. Extending Emulab to accept input in a number of different formats. This involved writing and testing code primarily in C++, but also Python and UNIX shell scripts.	
	Grammatech Inc. , Ithaca, USA	Jun, 2009 - Aug 2009
	<i>Software Engineer Intern</i>	
	<ul style="list-style-type: none">• CODE SONAR : Writing library models for Win32 API functions. The objective was to ensure that Code Sonar could detect violations of the US-CERT coding rules.	
	MAQ Software , Mumbai, India	Jul, 2007 – May, 2008
	<i>Software Developer Engineer</i>	
	<ul style="list-style-type: none">• MS STORE : Developed a tool to be used for maintenance (Slater) by the site administrators.• DPE ONLINE REQUEST TOOL : Developed a set of user controls for the UI of a website to be used within Microsoft. ASP.Net AJAX was heavily used in this site.• WINDOWS MARKETPLACE : Developed patches and bug-fixes for both the user-facing web pages and the administrator's tools for the site. One achievement was getting full debug support for the site in Visual Studio which significantly improved the team's productivity.	
	All the work done here involved using C#, ASP.Net and Microsoft SQL Server.	
TECHNICAL SKILLS	Proficient in C, C++, Java and Matlab. Professional experience in C# and ASP.Net and MS SQL Server. Some experience in Visual Basic and Python. Academic projects in Javascript, PHP, Oracle and mySQL. Basic exposure to Scheme and Scala.	
CURRENT PROJECT	Working with Prof. Matthew Might to develop an automatic parallelization system for C programs within the LLVM framework. The approach is to find inter-procedural dependences and determine whether or not certain functions can be executed in parallel.	
SELECTED ACADEMIC PROJECTS	A more complete and detailed list is available on request. <ul style="list-style-type: none">• MACHINE LEARNING (<i>Final-year undergraduate project</i>): Implemented and experimentally verified a new algorithm which used stochastic approximations and linear function approximations to determine the state-value function in reinforcement learning problems.• GRID COMPUTING : Developed a framework and set of libraries for programmers to write parallel programs in C#.Net. The framework hid the details of the grid from the user. No explicit message passing was required and no modifications were made to the language.	
PUBLICATIONS	Vivek Borkar, Jervis Pinto, Tarun Prabhu. A New Learning Algorithm for Optimal Stopping. <i>Discrete Event Dynamic Systems, Volume 19, Number 1 / March 2009, 91-113.</i>	
	Matthew Might, Tarun Prabhu. Interprocedural dependence analysis of higher-order programs via stack reachability. <i>Proceedings of the 2009 Workshop on Scheme and Functional Programming. (Scheme 2009). Boston, Massachusetts, MA. August, 2009.</i>	
REFERENCES	Available on request.	