

Manoj Dayaram

Software Engineer

Education

Carnegie Mellon University – Pittsburgh, PA

B.S. in Computer Science ~ Minor in Mathematical Sciences
Class of 2010, GPA 3.71

Skills

Programming Languages

Java, C, SML/NJ, SQL, C#
C++, x86/IA32, x86-64, Ruby

Work Experience

Salesforce.com – Software Engineer

Jul 2010 – Feb 2012

- **ProdTest** – *Production Test Framework used to verify release integrity.*
 - Managed and drove the direction of the framework – Product Owner role.
 - Began the steps to generalize the test and properties framework in a vision to open source them.
 - Based on a Scheduled Test Runner that took into account test prerequisites and interdependencies.
 - Used ANTLR Parser generator to parse and interpret different test prerequisites.
- **Test Failure Management System** – *Automation for test failure bug manipulations.*
 - Worked on automatic bug creation, closing, and reopening based on up to date test failure statuses.
 - Added feature for generic bug manipulations based on code check-in annotations.
 - Implemented a selective code line locking system at the team-level based on a team's test failures count.
 - Designed and implemented an automated test-run monitoring system for build failure analysis.
- **Internal Test Framework** – *Internal Salesforce test framework from within the app.*
 - Used MAT, jmap, and jstack to analyze and solve test framework memory consumption issues.
 - Used ExtJS to enhance features in current test runner console.
 - Designed a dynamic test implementation to facilitate reporting on multi-browser testing.
 - Migrated current test core from Selenium to WebDriver.
- **General**
 - Routinely debugged through issues in test coverage tools involving Atlassian Clover.
 - Investigated and POCed switching our internal Selenium VM infrastructure over to AWS.

MILLEE – Lead Programmer, Undergraduate Researcher

Mar 2009 – May 2010

- Used J2ME to develop educational cell phone games in Nokia 3110c for children in underprivileged countries.
- Trained 7+ programmers in concepts such as MVC, event driven programming, and game loop.

Carnegie Mellon University – Teaching Assistant

Aug 2007 – Dec 2008

- Systems Skills in C (15-123) – The basics of data structures, algorithms, and memory management in C.
- Pen Based Computing (15-397) – Introductory course to pen based computing using C# and the Microsoft.Ink package; developed semester-long content and assignments.
- Intermediate/Advanced Programming (15-111) – The basics of OOP, data structures, and algorithms in Java.

Tablet Math System – Server Side Administrator

Jun 2007 – Sep 2007

- Managed the database using SQL queries within C# and stored procedures.
- Provided a web interface with ASP.NET and C# for teachers to search for student's work.

Projects

Graph Animator – Independent Study in HCI

Jan 2007 – May 2007

- Built a pen-based app using C# and Microsoft.Ink to simulate Dijkstra's algorithm with a hand drawn graph.
- Application was presented in 2009 WIPTE Conference.
- Visit <http://www.andrew.cmu.edu/user/mdayaram/hci/finalreport.html> for a full report.