Ravi Mandliya

ravi.mandliya@gmail.com

(864) 650-3023

Education

M.S. in Computer Science - GPA 3.81/4.00   *August 2012 - May 2014*
Clemson University, Clemson, SC

B.E. in Information Technology   *August 2006 - June 2010*
Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, MP, India

Career History

Member of Technical Staff-2
NetApp,7301 Kit Creek Road, RTP,NC- 27709   *August 2014 - Present*
- Developing NetApp's ONTAP Disaster Recovery and Backup Solution(SnapMirror) in C/C++
- Developing Asynchronous Group Disaster Recovery Replication Solution for SnapMirror.
- Working on unit test framework using Perl and Expect
- **Technical Proficiency Demonstrated:** Distributed systems, programming in C in freeBSD kernel, C++ in userspace, Perl, Expect
- Contact: Vikas Yadav (+1-919-476-4135)

Embed. Software Engineer
Echostar,211 Perimeter Center Pkway NE #600,Atlanta,GA-30346   *July 2014 - August 2014*
- Worked on maintenance and testing of "Dish Anywhere" android App.
- **Technical Proficiency Demonstrated:** Android Development, Java, JNI
- Contact: Jennifer Olson, HR Generalist (+1-404-978-8115)

Research Assistant, *Clemson University, Clemson, SC*   *January 2013 - Present*
- Developed sensors for tracking turtles in Nevada for USGS using TI-MSP430 micro-controllers in C
- Working with USGS and Dr. Jacob Sorber on research involving tracking wildlife.
- Developing tools in python using Data Visualization so biologists can understand collected data.
- **Technical Proficiency Demonstrated:** Lower level C Programming, Microcontroller Programming, Python, Data Visualization, Matplotlib, Networking Protocols

Teaching Assistant, *Clemson University, Clemson, SC*   *August 2012 - May 2014*
- Helped Students in understanding assignments and Projects in Data Structure and Algorithms, Foundations of Computer Science and Introduction to Computer System Organization'.
- Developed Shell scripts for automatically grading student work and reduce grading time by 70%
- **Technical Proficiency Demonstrated:**ARM assembly, Data Structures, C++, C,

Associate Software Engineer, *Computer Sciences Corporation(CSC), Noida, India*   *July 2010 - July 2012*
- Administered UNIX based CISCO Ironport servers.
- Developed bash and python based scripts for log searching, content filtering and LDAP addressing.
- Represented team in global change review meetings and approved performance activity changes for team.
- Documented and monitored technology transition for a client involving more than 100 servers for quality assurance team.
- **Technical Proficiency Demonstrated:** Shell Scripting, Python, C, SMTP Server Management, Unix Operating Systems, Subversion(SVN), TCP/IP Model

Code Samples

Project Git Repositories: https://github.com/mandliya

Professional Project

Genie-Server Monitoring tool *Computer Sciences Corporation(CSC), Noida, India*

- Developed a server monitoring tool for a client's email environment in Python, which gave real-time information about the email processing queues, disk space, server logs etc on Unix based Ironport servers. It also provided text and email alerts in case of events like large queue, low disk space etc.
- **Technical Proficiency Demonstrated:** Python, Unix, C, TCP/IP

Major Academic Projects

The Electric Nemo: *Spring 2013*

- Developed a 2 D game using C++ and Simple DirectMedia Layer(SDL) API;Parameters for animation were obtained from an XML data file
- Large game developed with Objected oriented concepts and design patterns.
- **Technical Proficiency Demonstrated:** C++, XML, SDL

The Wireless car charging Android App: *Fall 2013*

- Developed an Android app with regards to understanding of Software Development Life Cycle
- Understanding the Agile Software Development and Android development in teams
- **Technical Proficiency Demonstrated:** Android Development, Software Engineering, Agile Concepts, XML

Simulation model for Switched Digital Video System: *Fall 2013*

- Developed a simulation of a digital video system, the tool was used to better understand the tradeoffs between an operators costs (number of channels that are required) with end user satisfaction. Aim was to broadcast more channels than available system capacity, by selectively sorting channels using zipf law.
- **Technical Proficiency Demonstrated:** C, Networking.

The Greedy Disk Scheduler: *Spring 2014*

- Developing a shortest seek time first (SSTF) scheduler for Linux kernel 3.2.54.
- Also developing system calls to record and analyze scheduler performance for all read/write requests.
- **Technical Proficiency Demonstrated:** Linux Kernel Development, C

Graphic driver for Linux kernel 3.2.54: *Spring 2014*

- Developed a graphic driver for a virtual Graphics Card using memory-mapped control registers, as well as driver allocated DMA buffers with interrupt handling.
- The driver enables the user to draw smooth-shaded triangles using the FIFO and DMA functionality.
- **Technical Proficiency Demonstrated:** Linux Kernel Development, C

Chess End Game Analysis: *Fall 2013*

- Implemented a project in python GUI to predict a winner or winning move in End game of chess using NegaMax search with alpha-beta pruning on Game tree
- **Technical Proficiency Demonstrated:** Data Structures, Python

Peformance and Review Analysis System: *Fall 2012*

- Implemented a project called Performance Analysis and Review System (PARSE) using Java and MySql as a Database Project which evaluates and rates each employee in System using various parameters.
- **Technical Proficiency Demonstrated:** Java, Sql and Interface Design

Compiler *Spring 2013*

- Created a Compiler in Python: Tasks include lexical analysis, syntactic analysis, semantic analysis, optimization and code generation
- **Technical Proficiency Demonstrated:** Compiler Design, python

Skills

Programming & tools: C, C++, Python, Java, J2EE, HTML5,CSS,PHP,ARM assembly, Bash Shell Scripting, SQL, LaTeX, XML, R, Socket Programming, subversion(SVN), Git, Microsoft Visual Studio, Eclipse,

Operating Systems: Windows, Linux, UNIX

Databases: IBM DB2, MySql, Oracle

RELEVANT COURSE WORK

Case Study in Operating Systems, Data Structures, Design and Analysis of Algorithms, Foundations of Software Engineering, 2-D Game Engine in C++, Database Management System, Software System Communication(Networks),Translation of Programming languages, Mobile Computing Systems, Machine Learning

LEADERSHIP ACTIVITIES

Vice-President, Prayatna- An organization for promoting literacy in rural Indore.   *Fall 2007 - Spring 2010*

AWARDS AND HONORS

Upsilon Pi Epsilon, Member of UPE: International Honor Society for Computing Sciences   *Fall 2013*

Young Turk Award, Awarded by CSC team for progressive changes in client's environment   *April 2011*