**Geerthivasan Mahendran**

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**Career Objective**

* Seeking a Full Time Software Developer position to utilize my strong organizational skill, educational background and ability to work with people being resourceful, innovative and flexible.

**Education**

**Texas Tech University [GPA: 3.7/4.0]** **Lubbock, TX United States**

*MS Computer Science, May 2012 [Available to Work From: June 2012]*

**Anna UNIVERSITY [GPA: 3.8/4.0]** **Chennai, TN India**

*BE Computer Science and Engineering, June 2010*

**Professional DEVOLOPMENT EXPERIENCE**

Edward E. Whitacre Jr. College of Engineering, Texas Tech University Lubbock, TX United States

*Graduate Assistant [Software Development and Maintenance] May 2011 – present*

* My principle job is to develop and maintain Engineering Course ware Site. I also perform maintenance and testing of servers which involves live streaming and networking. I also maintain the database of streams.
* This is a real time system where multiple queries will be posted by the clients simultaneously and the system responds on real time.
* Front end : Java, JavaScript, jQuery, HTML, CSS, XML Back end : MY SQL

University Medical Center Health System Hospital Lubbock, TX United States

*Software Developer Jan 2011 – Jun 2011*

* I worked in the project in which we developed systems which integrate Social Networking with a Blackboard setup. This system has also blogging and forum features implemented.
* This system provides Social Networking for Medical Residents along with the communicating blackboard system with Practitioners, Doctors and residents. This system is in Test in UMC.
* Front end : Java, jQuery, HTML, CSS, XML Framework Back end : MS SQL

Spiro Solutions Ltd. Chennai, TN India

*Associate Software Development Engineer Sep 2009 – Jul 2010*

* Here we were working on client side. We developed on-line shopping website for a retailer.
* We also developed an ERP system that maintains the inventory, financial accounting details and staffing details and was also involved in maintenance of the system.
* Front End : Java, JavaScript, jQuery, HTML, CSS, XML Back End : MY SQL

Compucare Technologies Pvt Ltd [Internship] Thanjavur, TN India

*Information Security Engineer Jan 2008 – Jul 2009*

* I worked in the maintenance of firewall IT Help Central of my company. The encryption algorithm used here is Advanced Encryption Algorithm (AES). I also worked in the team which upgraded Firewall to improve the efficiency of scanning of incoming packets.
* Here I also performed the role of database administrator where we developed an Inventory and Task Manager
* Front End : C, Java Back End : SQL Server 2005

**Certification**

**National Institute of Information Technology** **Chennai, TN India**

*Certified Java Programmer, January 2009*

**Compucare Institute of Technology**  **Thanjavur, TN India**

*Certified Hardware Engineer, January 2010*

**Research work**

Operation System Development for Texas Instruments ARM Processor Lubbock, TX United States

*Texas Tech University Jan 2010 – Present*

* This project deals with setting up an emulator, writing device drivers, Importing headers and setting up entire Operating system in Linux environment for ARM OMAP 35X Application Processor of Texas Instruments.
* Research also involves reducing the system crash when the device driver crashes by islanding the driver setup. This is done by preventing the interrupts caused by the device driver separate from the regular interrupts.
* The entire implementation is done in C and Assembly language in Linux environment which involves processor level coding

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Libraries Development for Rational Arithmetic Operation Lubbock, TX United States

*Texas Tech University May 2011 – Dcc 2011*

* This project deals with creating Libraries for implementation of Texas Tech Real number arithmetic for performing Advanced Calculations in Python.
* These libraries can be very useful to test collision of objects over high speed motion bodies.

SDD1 Query Optimizer Implementation and Analysis Lubbock, TX United States

*Database Management Graduate Research Project Jan 2011 – Dec 2011*

* This is a project in which SDD1 query optimizer is implemented using python and then tested with huge DB.
* Then this optimizer was analyzed in virtual distributed environment using CUDA language.

Test Reliability Engineering of TROPICO-R 150 System Lubbock, TX United States

*Software Reliability Engineering Research project May 2011 – Aug 2011*

* This research involves predicting the reliability of software development for the next 2 years with the test case results for the previous 5 years for TROPICO-R 150. This software is used in embedded system for analyzing the pulse signal.
* We used the SMERFS tool which was the best tool for this particular data set and produced reasonable prediction.
* Software Reliability Estimation for TROPICO-R 150. Tool Used :SMERFS 3 Language : Assembly

Handwritten digit recognition using Support Vector Machine Lubbock, TX United States

*Machine learning Academic project Aug 2010 – Dec 2010*

* Project deals with recognition of the hand written digits with help of support vector machine by recognizing pattern.
* This has wide range of application from Pin code recognition, Bank Account Number recognition, Tax forms Etc.
* Pattern recognition tool : Support Vector Machine (Self Developed) Language : Python
* Handwritten Digit Recognition Implementation Language: Mat lab Back End: MS excel.

**Techinical Skills**

* Operating System : Windows 95/98/ 2000/ XP/Vista/7, OS-X, Android, Linux
* Design Methodologies : UML, Agile,C2,Multi Tier, Database-centric, Event-driven, MVC
* Language : C, C++, Java, J2EE, PHP, Python, Prolog, Pearl, Ruby
* Web/Presentation: HTML, CSS, JSP, Java Script, XML
* Databases : MySQL, Jbase, ASP.Net AJAX Tool kit , SQL Server2005/2008/2010, MS-Access
* Tools : MS Office, Rational Rose, Photoshop, CorelDraw, Flash, CARSE, SMERFS 3,Windows Media Encoder

**Additional Skills**

* Have worked in simulation Project which involves analyzing the pulse signals from Embedded System and testing them with alternating input. Language: C-Sim.
* Experienced in making requirements, design documentation and writing test cases with the requirement documents. .
* Worked with Remote Servers, encoders and decoders which involve live video streaming and live broadcasting.
* Worked with testing emulators, machine level coding of microcontrollers and writing drivers for operating system.

**Achivements**

* I am a member in Golden Key Organization. My membership ID is 8149892. This organization offers member ship to only the students who come within top 10% of the University.
* I was awarded the best employee for the academic year 2009-2010 during my tenure in Spiro Solutions Ltd.
* I got Instate Scholarships followed by Graduate Assistant for my entire course based on my Academic performance.
* I have actively participated in conference held by the research journals and also presented posters related to my research work. I am a active IEEE member for the past 5 years. IEEE Member # 90482063