

**EDUCATION****Master of Science in Computer Science, University of Illinois at Chicago (GPA: 3.83/4.0)**

December 2015

- Coursework: Computer Algorithms, Object Oriented Language & Environment, Computer Systems Security, Distributed Computing Systems, Development of Mobile Apps, Data Mining and Text Mining, Software Engineering, Cloud Computing

**Bachelor of Engineering in Computer Science, Anna University, India (GPA: 8.74/10.0)**

April 2013

- University Rank Holder: Graduated First Class with Distinction – 31<sup>st</sup> rank out of 6310 in Computer Science Batch of 2013

**PROFESSIONAL EXPERIENCE****Software Engineer Intern, W.W.Grainger, Inc., IL**

June 2015 – August 2015

- Designed a working prototype for G-Sales iOS Mobile App used by Territory Sales Representatives (TSR) for a one stop solution
- Developed features using Swift to render front-end and JavaScript to perform back-end logic with cloud functions on Parse
- Performed regression testing for smooth data migration between SAP ECC and CRM systems and Hybris Commerce Suite

**Programmer, Department of Medical Education, UIC College of Medicine, IL**

August 2014 – May 2015

- Modified existing web applications of College of Medicine to correct errors, upgrade interfaces and improve performance
- Collaborated with other team members in plan, design and development of robust solutions using JavaScript and jQuery
- Managed the student database in Oracle and queried the database to generate periodic reports for course marketing analysis

**Assistant Systems Engineer, TATA Consultancy Services, Chennai, India**

November 2013 – June 2014

- Developed RICEF objects for retail process using ABAP for client – Woolworths, the largest supermarket store chain in Australia
- Enhanced the existing functionality of SAP's standard business application based on client's needs via customer exits and BADI
- Migrated data using ABAP and LSMW from a Non-SAP system to a SAP system to increase performance and efficiency

**Co-founder & Developer, WebDesignst.com, Chennai, India**

September 2012- October 2013

- Designed overall layout and developed interactive websites for clients using HTML, CSS, JavaScript and jQuery
- Developed UI layers for mobile applications using Java for Android with SQLite database and Objective-C for iOS platform
- Interfaced with business analysts, developers, and technical support to determine optimal specifications

**PROJECTS****Neighborhood Map ([http://shanmathi1.github.io/neighborhood\\_map/](http://shanmathi1.github.io/neighborhood_map/))**

August 2015

- Developed a neighborhood tour application using HTML, CSS, JavaScript, Google Maps API, FourSquare API and Knockout.js
- Implemented search bar functionality to add map markers and third-party APIs to provide more information about the location

**Tweet Classification**

April 2015

- Implemented sentiment and opinion mining techniques of data mining on tweets from 2012 US Presidential elections
- Designed a classifier from the training data set of both the candidates from their twitter page using Java's API for Weka
- Tested the classified data by Naïve Bayes and SVM Algorithm for good F-measure, recall, precision and accuracy

**Android Music Player App**

March 2015

- Designed and coded two Android Apps for implementing a music player using Java, Android SDK and SQLite database
- First App stores a number of audio clips and contains a service intended to be bound, which exposes an API for clients to use
- Second App consists of an activity that exposes functionality of first App and binds to the service for playing desired audio clips

**Web Application Security**

November 2014

- Designed, implemented and analyzed the security features of a web application using ASP.NET, C# and MySQL workbench
- Implemented Role Based Access Control (RBAC) to regulate access to resources based on roles of individual users of application
- Secured the application from security vulnerabilities including SQL injection, cross site scripting and cross site request forgery

**Assembly Language Emulator**

October 2014

- Developed GUI for implementing assembly language instructions with set of widgets for displaying the state of computer
- Identified and displayed the state changes brought about by the execution of assembly instructions on memory and registers
- Implemented using Smalltalk and interface designed with customizable search mechanisms making it easy for the naïve users

**Visual Role Mining**

January – March 2013

- Developed an interactive visualization front end system for role engineers to design roles and identify permissions to them
- Designed an ability to zoom in on to a specific range of data and adjust the range of viewed data through a drill-down process
- Clustered the records in the training set using K-means (Data size – 800 users, 300 roles and 2000 permissions)

**TECHNICAL SKILLS****Languages:** C, C++, Java, HTML, CSS, JavaScript, Python, Objective C**Database:** Oracle 9i, 10g, MySQL, MS Access**Software Practices:** Iterative Development, Agile Scrum**Operating Systems:** Mac OS X, UNIX, Windows