# PRAKASH NATARAJAN

56, Englewood Avenue, Buffalo, NY 14214 | mail@prakashn.com (716) 361-8720 | http://www.prakashn.com

### **EDUCATION**

Master of Science in Computer Science and Engineering

**Fall 2014 – May 2016(expected)** State University of New York, Buffalo (GPA 3.5)

**Bachelor of Engineering in Electronics and Communication** 

June 2007 - May 2011

Anna University, Chennai, India (GPA 7.8)

### TECHNICAL EXPERIENCE

Platforms : Mac OS X, Windows (8, 7, XP, 98, Vista), Ubuntu.

: Java, Swift, C, C++, C#, ASP.NET, Android, HTML, Javascript, Python. Languages **IDE Tools** : Xcode, Eclipse, Android Studio, Visual Studio, Sublime Text, IPython.

Others : SQL server, GitHub, git, vim, QTP, SoapUI, TortoiseSVN, HP Quality center, BMC Remedy Tool.

**CERTIFICATION:** MCTS .NET framework 4 web applications development from Microsoft.

#### PROFESSIONAL EXPERIENCE

**Programmer Analyst** 

June 2011 - March 2014

Cognizant Technology Solutions (P) Ltd, Chennai, India

Select Desktop for underwriters:

- Handled the development and enhancement activities of MVC based .NET framework 4 application in Insurance domain.
- Undertook the responsibility of server migration for the whole application from Windows XP to Windows 7.

Production Application Dashboard for Managers, Directors and VP:

- Enhanced the portal which were used for displaying the time critical defects, Also worked with quality assurance team for running and maintaining automated scripts in case of team's absence. Integrated the portal with the results of QTP.
- Developed a mailing windows service to mail the screen shot of the defect with the criticality and the time the defect occurred.
- Assisted in 4 additional enhancements for improving notification of the critical defects such as phone messaging service, selecting and deselecting user for mail and phone message delivery, option to add and edit users, stopping auto refresh.
- Assisted in database server migration from SQL server 2008 to 2012.
- Assisted in moving the application from web to mobile, which was made in angularJS.
- Stack: ASP.NET, c#, VB.NET, Javascript, VB scripting.

Support for webgen, CLPortal and Virtual desktop application:

- Delivered technical support and analysis for around 3 applications in insurance domain, which was maintained for underwriters.
- Handled the production level tickets for around 3 applications in client and customer facing environment.
- Provided late night support for all major releases and also worked flexible hours for the application support.
- Worked in QTP tool in order to generate the automated scripts for testing the flow of the owned applications in all the servers.

# ACADEMIC PROJECTS

### **Object Oriented top-down Parser:**

Fall 2014

Designed a parser with a team of two in Java that translates a program into JVM byte codes to generate the object and sequence diagram of the parser in Jive exactly as specified in the requirements of the grammar.

## **Design Pattern implementation in Java:**

Implemented the Decorator pattern, by achieving the inheritance with delegation and association and also implemented a custom made Iterator for BST, which checks for equality of BST using Iterator design pattern.

# Priority Scheduler and Virtual memory for PintOs:

Fall 2014

Implemented the kernel priority scheduler for PintOs operating system and handled priority inversion with priority donation of high priority threads to low priority threads and also designed the virtual memory for the PintOs.

# **Functional and Logic Programming:**

**Fall 2014** 

- Implemented alpha equivalence of lambda calculus in standard meta language with functional programming.
- Implemented beta and eta equivalence of lambda calculus in Prolog with logic programming. Designed a program in Prolog to backtrack and find the possible paths from one location to another.

### **Know your plants:**

As a part of software engineering course, we went through the implementation of site for botanical garden with step by step method of software phases like requirement gathering, customer specification document, system specification document and project plan.

# Face Recognition using back propagation neural networks:

- Implemented using a PIC micro controller for analyzing the images by dilation and erosion, if false, we evoked an alarm. Our Aim was to use a better efficient mechanism than Principle Component Analysis, which is used in existing system of face recognition.
- Trained the neural network and recognized the images in the database and also evoked an alarm in case of an unrecognized face, thus achieving the security. System detected false faces at 81 percent accuracy.
- Stack: Matlab

**OPEN SOURCE:** Contributed few programs to CTCI GitHub repository in Swift programming language.

### **RELAVANT COURSES:**

Design and Analysis of algorithms, Fundamentals of Programming languages, Operating system concepts, Software Engineering.

# PERSONAL DATA:

LinkedIn: http://lnkd.in/bEhZRiz GitHub: https://github.com/prakashn27