

Prashant Tanksali

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EDUCATION

North Carolina State University, Raleigh, NC

Master of Science in Computer Networking

GPA 3.6/4.0

May 2018

Courses: Service Oriented Computing, Operating Systems, Computer Networks, Analysis of Algorithms, Database Management Systems, Object Oriented Design and Development, Topics in Data Science, Internet Protocols, Advanced Internet Protocols

University of Mumbai, India

Bachelor of Engineering in Electronics, First Class

GPA: 3.7/4.0

August 2014

WORK EXPERIENCE

Software Engineering Intern – R&D team at John Crane (Chicago, IL)

Jun 2017 - Aug 2017

- Developed a module for the IoT based **Predictive Diagnostics System** using **web2py(Python)** framework which is used by field engineers to configure sensors (temperature, pressure) with channels of data transmitting devices.
- Designed and developed an **SQLite** database and the UI using **HTML, CSS, JavaScript and AJAX** for the web application. Implemented features like user management, adding/editing devices, device-modules, device-channels and wrote custom web2py validators using regex for field validations.

Research Assistant at North Carolina State University (Raleigh, NC)

Feb 2017 - Present

- Assisted Prof. Ed Gehringer in creating exercises in **Java** and **Ruby** conforming to several software **design patterns**.
- Improved event logging feature for Expertiza (**Ruby on Rails** application) by using DRY principles to refactor legacy code.
- Wrote several **Rspec** test cases for Expertiza to increase code coverage by 50%.
- Fixed and improved rubric criteria. Restricted access of rubrics only to admins.

Software Engineering Analyst at Accenture | Finance, Capital Markets (Mumbai, India)

Sep 2014 - July 2016

- Created a utility with **web automation** tool Sahi Pro that cut the trade verification and integration time by half. The utility parsed numerous file formats like pipe-delimited, XML and csv to obtain data and validate the content in the UI.
- Minimized execution time by 40% through **automation** of regression flows using **C#** scripts in **Selenium Web Driver** conforming to **Page Object Model** pattern, also single-handedly maintained the automation scripts using Microsoft TFS.
- Led a 3 member automation team and collaborated with tech architects to estimate, plan and implement the utility.

ACADEMIC PROJECTS

- Referral System using Android and Play Framework(Java):**
Developed a **service oriented, multiagent** referral system using akka actors that receives service requests from users and locates the best service provider in its network. Implemented an **android application** to consume the above RESTful service.
- Location Tracker using Android and Play Framework(Java):**
Developed an **android** application and a **RESTful- API** using **Play Framework(Java)**. Utilized various android APIs in the application that periodically sends location updates to the web server which calculates the distance from the start point.
- Non Persistent Heap for Inter Process Communication:**
Developed a **kernel module** which creates kernel space shared memory for multiple user-space processes. It obviates the need to create message passing interfaces and substantiates Inter Process Communication by improving speed and concurrency.
- Database application for Course Registration:**
Developed a web application for substantiating course registration at a university using the **Java Struts(J2EE) framework**. Designed a highly normalized DB (**Oracle 10g**) with triggers and procedures using PL/SQL.
- Wireless Reconfigurable Health Monitoring System:**
Implemented a wireless sensor network by programming **Zigbee** modules and **Arduino Uno** boards which transmitted sensor data over considerable distances. Published a paper on this project in IJIRT (Volume 1, Issue 12, May 2015)
- Service Function Chaining in a Layer 3 Data Center Network:**
Implemented **Service Function Chaining** where service functions can be introduced into the path of traffic, thus eliminating topological dependence. Created a custom RYU application using **Python** which used VxLAN tunnels to steer traffic.

TECHNICAL SKILLS & CERTIFICATIONS

Certification: Oracle Certified Professional, Java SE 6 Programmer

Languages: Java, Python, Ruby, JavaScript, C++, SQL

Web Frameworks: Struts(J2EE), Web2Py, Play 2.0, Ruby on Rails

Technologies: HTML, CSS, AJAX, MVC, JSP, jQuery, REST-API, Test Automation, Web Application Testing, Amazon - EC2, Test Driven Development, Akka, Android, Agile

Tools: Eclipse(J2EE), PyCharm, RubyMine, Visual Studio, Android Studio, Selenium Web Driver, Sahi Pro, TestNG, Cucumber, Jenkins, VMware Workstation, Oracle VM Box **Version Control:** Git, Github, Microsoft TFS

Databases: Oracle 11g, SQLite3, MySQL **Platforms:** Windows, Linux **Networking:** TCP/IP, IP Routing, Socket Programming, DHCP, NAT