2502 Avent Ferry Rd, Apt 205 Raleigh NC – 27606 (650) 495-0343

# SHYAMSUNDER RAMAKRISHNAN

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### **EDUCATION**

**Master of Science, Computer Science** 

North Carolina State University, Raleigh, NC

**Bachelor of Engineering, Information Technology** 

University of Mumbai, India

Expected May 2018

**GPA 3.7** 

May 2014

GPA 3.8

**Relevant Coursework:** Data Structures, Algorithms, Operating Systems, Computer Networks, Software Engineering, Cloud Computing, Automated Learning & Data Analysis, Algorithms for Data Guided Business Intelligence, Software Security

**TECHNICAL SKILLS** 

Languages: Java, Python, C#

Web Technologies: Java Spring MVC, NodeJS, AngularJS, ASP.NET MVC, Ruby on Rails, HTML5, CSS3, jQuery, Bootstrap Database Technologies: MS SQL, MySQL, Oracle 10g, Apache Cassandra

Tools: Ansible, Docker, Jenkins, Maven, Selenium, ElasticSearch, Logstash, Kibana, Apache Spark, Tensorflow, Amazon AWS

#### **WORK EXPERIENCE**

#### **Software Developer**

Tata Consultancy Services, Mumbai, India

Aug 2014 - Jul 2016

ABN Amro Bank, UK – Global Treasury

- Implemented a Forex and Money Market deal capturing system for Treasury traders using ASP.NET MVC framework
- Developed a customized tool in C# for automating an issue tracking system that reduced approx. 5000 tickets per month
- Customized a workflow system in Spring to trigger scheduled EOD notifications on bank's balance and currency positions
- · Served as a lead developer, held design discussions with clients and ensured timely software solution deliverables

#### **Software Engineering Intern**

#### Cisco Systems, Research Triangle Park

May 2017 - Aug 2017

- · Worked with the Cloud Collaboration team to Implement Cisco Spark call failure analysis using machine learning
- Built a GPU server and setup the model training and prediction workflows to perform real time call failure classification
- Worked on troubleshooting issues, bug fixes, automation scripts and REST API performance tests for Cisco Spark Call
- · Technologies used include Linux Bash, Python, Docker, ElasticSearch, Kibana, Apache Spark, Maven, Cassandra

#### **Programming Intern**

### **NCSU Office of Information Technology**

Feb 2017 - May 2017

- Worked on implementing OIM as NC State's central infrastructure that handles user Identity and Access Management
- Performed application testing and data validation during IDM data migration from legacy Unity system to OIM

## **SELECT PROJECTS**

Slack DevOps Chat Bot - VMOps (NodeJS, Vagrant, Ansible, Amazon AWS, AWS CloudWatch)

- · Developed a conversational slack bot to configure and manage remote virtual machines on AWS servers using Ansible
- Implemented features for users to spin up VMs, monitor resource utilization, merge VMs and shrink VM resources

Performance Analysis of Containers and VMs for Cloud Applications ( Docker, VirtualBox, Grafana, OpenNMS )

- Analyzed performance of Docker containers vs Type 2 hypervisor based VMs for compute and data centric cloud apps
- Performed benchmark tests for CPU, memory, disk I/O metrics; rendered real time comparison using Grafana, OpenNMS

Open Source Software Contribution - Expertiza ( Ruby on Rails, Google Drive API, Heroku )

- Added a collaborative assignment review feature in Expertiza Ruby on Rails LMS application using Google Drive API
- Established service account authentication and maintained peer review goodle docs with appropriate access levels

**Twitter Sentiment Analysis** ( Python, Apache Spark, Kafka, D3.js )

- · Processed live streams of Twitter reactions on an event using Apache Kafka, Python and rendered a sentimental analysis
- Analyzed tweets on the context of positive or negative reactions using classifiers and provided visual results using D3.js Reliable File Sharing System over UDP ( Python, C++ )
- Developed a file sharing system using Go-back-N with automatic repeat request and Selective Repeat ARQ over UDP
- · Implemented retransmission scheme, timeout and checksum to ensure reliable and efficient UDP data transfer

## **AWARDS & RECOGNITION**

- Achieved a jury award for Second position at LexisNexis Rise to Code 2017 Hackathon
- Certificate of Excellence on client nomination at Tata Consultancy Services for proficient application development

## **COMMUNITY SERVICE**

• Engaged in educational drives as a fellow at Teach for India to provide schooling for under-privileged children