**Work Experience:**

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| **San Jose, CA 95110**  **Github.com/RohitKotalwar**  **Linkedin.com/in/rohit-kotalwar-a7ba999b** | **Rohit Kotalwar** | **+1 (408) 667-2864**  **Rohit\_Kotalwar@outlook.com**  **Website:-Rohitkotalwar.herokuapp.com** |

**Software Development Engineer - II**

**Cisco Systems Inc. March 18 - Present**

* Currently Working on building scalable automation environment and creating continuous deployment framework using python for testing and deploying software on next generation Distributed Routing Platform.
* Developing Parser to Check the Consistency across the different Distributed Routing Platform (involving ASR9000, NCS5500 Routers).
* Integration, Regression Testing for Open Forwarding Abstraction which is Cisco’s hardware abstraction layer for Broadcom DNX Network Devices.

**Software Developer Intern – Internet of Things**

**F5 Networks Inc. June 17 - Aug 17**

* Developed Web Application using MEAN Stack for IoT framework and Integrated with BIGIP (F5 Product).
* Created the provision to configure and incorporate access rules in IoT Framework through web application.
* IAppLX application can create and configure the MQTT Servers and configuration for access management.
* Experienced with UI framework, RESTful API’s and continuous Integration tools GIT, Perforce, Jenkins.
* Maintained version control of the application via Perforce.
* Followed Agile development and delivered new features on time, communicated updates in daily scrum meetings.
* Working with various team members, such as project managers, product manager, QA, and other developers.
* Hands on Experience using HTML, CSS, ANGULARJS, NODEJS, Data Structures.

**Graduate Research Assistant.**

**San Jose State University. Aug 16 - Dec16**

* Researched and Developed Routing and Load Balancing application using SDN Floodlight Controller’s REST API’s and Python.
* Researched and Developed Intrusion Detection system using SDN Floodlight controller and SNORT IDS, simulated various attacks to determine the agility of SDN. Determined performance analysis of SDN during the various attacks.

**Languages and Skills:**

* **Programming:** Java, C++, Python, JavaScript, AJAX, Nodejs, Angularjs, Perl, PHP, REST, Linux, Unix, D3.JS
* **Web Languages & Technologies:** HTML5, CSS, Bootstrap, Neo4j, JSON, LAMP Stack, High Charts.
* **Frameworks and Databases:** Express, MySQL, MongoDB, MSSQL, Redis Cache, Docker.
* **Cloud and Middleware:** Amazon AWS, Heroku, Apache Kafka, Elastic Search, Eclipse, GIT, Perforce.
* **Network Protocols & Other Tools:** TCP, UDP, ARP, RTSP, HTTP, DNS, NAT, BGP, OSPF, RIP.

**Education:**

* **MS in Computer Engineering *Jan’16 – Dec’17***

**San Jose State University *GPA - 3.4/ 4.0***

* **BE in Computer Engineering *Aug’10 – Jun’14***

**University of Mumbai *GPA -3.5 / 4.0***

**Academic Projects:**

**Developed Cloud Infrastructure for Virtualization of Mobile Sensor - Animal Tracking System [Html, Nodejs, Angularjs, MySQL]**

* Implemented virtualization of mobile sensors and built a multi-tenant, scalable **cloud** application in **Node.js.**
* Developed dashboards for users to visualize the sensor data.
* Developed the application as a subscription-based model where the user can subscribe & unsubscribe to the sensors and get charged for the usage accordingly (pay as you use model).
* Developed **android** application to trace the mobile sensors.

**Designed and Developed Cloud Infrastructure for Data insight in Software Defined Networks. [Python, MongoDB, JSON]**

* Capturing Real Time Packet using Pycapa and storing it into the **Kafka** messaging queue. Converting Raw data of Network Packets into JSON Object.
* Classifying data and forming the Data clusters. And apply different **Machine Learning** algorithms (Multiple Classifier) on top of clustered data and predict Network attack. **Elastic Search** API’s to get the data from Clusters.

**Web Application for Family Tree Representation. [D3.JS, Sankeyjs, google map, Angularjs, Nodejs, Html, Bootstrap, Neo4j, Json, Mongo]**

* Developed application where user can create graphical based representation of the relations using **D3.JS**.
* Also user can depict the location of relatives using google maps. Sankey representation to display the relations at top level and low level. User can modify or delete the relations.
* Used **Neo4j graph database** to store the data. **Containerized** the two different services one for UI and other for Neo4j graph database using **Docker** and deployed it on AWS EC2.

**Multithreaded Video Streaming Application. [Java, EC2, S3 AWS]**

* Developed Video Streaming Server application for streaming and signaling data using RTSP and RTP protocol.
* Application support multicasting and unicasting through multithreading, Server is deployed on AWS Ec2, S3
* Used Jmeter for performance testing for over 1000+ requests.

**CloudBox(Drop Box Like Utility). [Html, CSS, Bootstrap,**

**AngularJS, NodeJS, MongoDB, Web Sockets, Amazon EC2, S3]**

* Developed Dropbox like application where users can sign up and store different formats of Files in Cloud.
* Developed the Restful API’s to implement the features like uploading, deleting, downloading and listing all the files using NodeJS.

**Routing and Load Balancing Application. [Python, Floodlight Controller, Mininet, SDN, REST, OpenFlow]**

* Performed Shortest Paths Routing using Dijkstra’s Algorithm.
* Load Balancing is performed on all shortest paths.
* Bandwidth utilization on all the shortest path are calculated, traffic will be routed through the path which has less bandwidth utilization.

**Publications:**

* Data Mining: Evaluating Performance of Employee’s using Classiﬁcation Algorithm Based on Decision Tree. http://estij.org
* Robust and Agile System against Fault and Anomaly Traﬃc in Software Deﬁned Networks**.** <http://www.mdpi.com/2076-3417/7/3/266>