



#### **PROFESSIONAL SUMMARY:**

- Experienced Software Engineer with Master of Electrical Engineering and a demonstrated history of working in IT industry.
- Skilled in Python, Cloud Operations, TCP/IP stack, Network Security, IoT domain and Software Defined Networking.
- Experienced on Cisco Prime to monitor the network devices, configuration management, scripting changes, and threat analysis.
- Knowledge and experience of complex software design for distributed systems in embedded networking projects.
- Experienced in Agile framework and Scrum Methodology.

#### **COMPETENCIES:**

Programming Languages: Python (Advanced), C, PHP, Unix Shell/Bash Scripting, Go (Beginner)

Data Science Tools: Pandas, Numpy, Tableau, Scikit-Learn (sklearn), Scipy, Spark, MLlib, Tensorflow, Seaborn, Matplotlib, CUDA

Machine Learning: SVM, Naïve Bayes, Random Forest, Decision Tree, Linear regression, Logistic regression, Multi-Layer Perceptron, KNN, Neural Net, KMeans Clustering, Hierarchical Clustering, Mixture Models, Artificial Neural Networks, PCA

Big Data Ecosystem: Apache Spark, Hadoop, Map-Reduce | Frameworks: Django, Flask, Pandas, Tkinter(GUI) | Testing: Selenium, JIRA Databases and Cloud: SQL, PostgreSQL, MongoDB, HBase, Redis, AWS, AZURE

Knowledge/Expertise: Network Programming, Firewalls, Network Security, Cryptography, Deep Learning, Data Structures and algorithms, OOPS, Client & Server Architecture, SDN & NFV, Deep Learning, Service Oriented Architecture, Kernel Architecture, AES & DES Encryption. Certification: Cisco Certified Network Associate (CCNA Routing and Switching CSCO13315295), AWS Certified Developer – Associate

Tools: GIT, GitHub, Pycharm, Jupyter Notebook, Rstudio, Eclipse, VirtualBox, VMware

#### PROFESSIONAL EXPERIENCE:

#### **SOFTWARE DEVELOPER, OCTONIUS Inc.**

May 2017 - October 2017

- Worked as a Software Developer at Octonius, responsible for Creating voice integration and VOIP Search Functionality.
- Experienced in integrating file transfer-based Search Engine along with Voice based search using Web-kit-speech Recognition API.
- Worked on *Machine Learning algorithm* to predict the user-based recommendation based on the pattern analysis.
- Responsible for designing a test framework to validate the code changes before deploying on production servers.
- Worked on monitoring the software patch, testing, bug analyzing and providing a fix collaborating with other developers.
- Write REST APIs, helper functions and test automation scripts for the internal test automation framework using JS and Python
- Engage with customers and *support* to solve production issues.
- Technologies used: MEAN stack (MongoDB, Express.JS, Angular.JS, Node.js), SQL, Rest API, Docker, Jenkins, SOA.

# IT Support (Student Assistant), San Jose State University.

February 2017 - May 2018

- Maintained Cisco routers and switches, configured L2, L3 protocols on routers.
- Troubleshooted the routers (routing protocols) and switches (Vlans, STP).
- Experienced troubleshooting network problems for LAN and Wireless communications and security issues.

### **ACADEMIC PROJECTS:**

# Keyword Recognition of business on Yelp based on reviews - Python, Jupyter Notebook, Sklearn

SJSU, SPRING'18

- Implemented Text mining-based keyword identification of business reviews on Yelp based as a part of yelp dataset challenge.
- The model mines important keywords from good and bad reviews of texts and displays them in the search result for users to take a quicker decision on choosing options.

Movie Recommendation System using Machine Learning - Machine Learning, Python, Jupyter Notebook, SKlearn

SJSU, FALL'17

- Implemented user-based collaborative filtering on MovieLens dataset of 1682 movies and 943 users. Calculated metrics like Euclidian Distance and Pearson Correlation score to make user-based recommendations.
- Predict Survival on the Titanic Machine Learning, Python, Jupyter Notebook, Sklearn

SJSU, FALL'17

- Feature Engineering and data cleaning to handle non-numeric, missing and categorical values.
- Used Support Vector Classifier to train model and predict survival with an accuracy of 76%.

Slack Bot for Coursework Info – Slack API, Python, Quepy, DynamoDB, AWS Lambda

SJSU, SPRING'17

- Built a question-answer chat bot against data stored in AWS DynamoDB and a Slack API.
- Defined regular expressions to match incoming natural language questions using NLTK tagger.
- Configured AWS API Gateways and deployed the business logic on AWS Lambda using Python-Lambda libraries.
- Implemented using Slack API, Python, DynamoDB, Quepy, AWS Lambda, NLTK.

## Cloud Hosted Generic SDN Controller & Network Data Classifier -VMware.

SJSU, FALL'17

- Infrastructure which enables end users to analyze and generate data insights for the given network.
- Modules such as Pre-Classifier, Classifier and Data Storage and Analysis.
- Implemented Using Python, Kafka, Wireshark, Machine Learning algorithms, Spark, Hadoop, Elastic Search APIs.

# Develop a Load Balancing Algorithm for SDN using Floodlight controller – SDN, Floodlight, Mininet, Python

SJSU, FALL'16

- Lead a team in developing and implementing a load balancing algorithm using POX controller.
- Was involved in *debugging* and developing the load balancing code.
- Developed and Implemented *Dijkstra* Shortest Path and *round robin* balancing algorithm.

### **EDUCATION:**

Master of Science (Electrical Engineering with Deep Learning, 3.4 GPA) San Jose State University, San Jose, CA, USA

May 2018

Bachelor of Technology (Electronics and Communication, 3.86 GPA)

VR Siddhartha Engineering College

May 2016