

PUNEETH REDDY PODDUTOORI

Address: 201 S 4TH Street APT 405, San Jose, CA 95112

Mobile: +1 (510)-458-8369 | **Email:** puneethreddy.poddutoori@sjsu.edu

GitHub: <https://github.com/puneethreddy20> | **LinkedIn:** <https://www.linkedin.com/in/puneethreddy-poddutoori>

EDUCATION

San Jose State University, San Jose, CA

August 2016 – May 2018

Master of Science in Electrical Engineering, Specialization Computer Networking.

GPA: **3.52**

Coursework: Broadband Communication Networking, Network Security and Cryptography Principles, Network Programming, Internetworking, Software Defined Networking and NFV, Voice and Data Networks, Mobile and Wireless Networking.

Osmania University, Hyderabad, India

June 2012 - June 2016

Bachelors – Electronics & Communication Engineering

GPA: **3.5**

Coursework: Computer Networks, Radar and Satellite communication, Embedded systems, Mobile cellular Communications, Computer organization & Architecture, VLSI Technology, Programming in C & C++.

TECHNICAL SKILLS

- **Programming languages:** C, Go, Python, C++, Java, Data Structures & Algorithms, SQL, Databases, HTML, CSS, Java Script.
- **Networking Protocols:** Linux Networking Stack, TCP/IP, Network Virtualization, SDN, OpenFlow, Routing Protocols such as BGP, OSPF, RIP, EIGRP, Subnetting(VLSM), VLANs, ACLs, UDP, ARP, DHCP, NAT, TLS, DNS, VPN, IPsec, HTTP, CIDR, QoS, VoIP, MLPS, GRE, and Multicast.
- **Cloud Technologies:** Kubernetes, Docker, OpenStack, GCP, KVM, AWS, EC2, VPC, Route53, EBS, ELB, Lambda, RDS
- **Big Data Technologies:** Hadoop, HBase, Hive, Spark, MapReduce.
- **Operating Systems:** Ubuntu, CentOS, Red Hat Linux, Cisco CLI.
- **Frameworks/Tools:** Cisco VIRL, Cisco NSO, GNS 3, Wireshark, Snort, Nessus, nmap, tcpdump, Ansible, Git, Django, REST API.
- **Certifications:** Coursera Python and Python Data Structures, Core Java and CCNA training.

WORK PROJECT EXPERIENCE

Software Engineer Intern – SYMANTEC CORPORATION

February 2018 – June 2018

- I have developed an application which will allow end users to manage LDAP Directory. This application allows to create LDAP Groups, Service Accounts and manage them based on user's requests. I have programmed the backend in GO language, frontend using HTML, CSS, JavaScript and its deployed in AWS. I have been part of Cloud Platform Engineering Infra Eng. Team in Symantec. See it here <https://github.com/Symantec/ldap-group-management>

Department of Mathematics & Statistics, San Jose State University, San Jose, CA.

October 2016 – May 2017

Tutor & Instructional Student Assistant

- Mentored students and helped them to understand advance problem solving, algorithmic analysis and debugging.

ACADEMIC PROJECTS

Dynamic Flow Steering Application using SDN

September 2017 – April 2018

- The Dynamic flow steering application interacts with the SDN controller for all network configurations over RESTful API's. It retrieves the end points and measures the network metrics such as Latency, Bandwidth and the real-time resources availability at each node. This enables us to dynamically react to network conditions and update the flow tables automatically.
- Technologies being used: **Ryu SDN Controller, Python, Mininet, JSON.**

Big Fun Network with 3000 Nodes

October 2017 – November 2017

- Deployment of large virtual network of 3000 nodes which consists of multiple VIRL instances and GNS3 instances with routing enabled and deployed using Ansible Network Automation.
- Technologies used: **Cisco VIRL, GNS3, Ansible, Jenkins, Autonetkit, OpenStack, VM Maestro, Python, VXLAN, GRE.**

Implementing SIP Functionalities using VoIP Wireless Ad-hoc Networks

October 2017

- Developed a basic SIP client-side application with registration, un-registration of users & call initiating functionalities of SIP.
- Technologies used: **Asterisk server, PJSIP libraries, Python, Ubuntu, X-lite software.**

Network Traffic Analyzer & a Tool to Defend against DDoS Attack

April 2017

- This Project is about Analyzing the packet to detect DDoS botnet download by parsing HTTP traffic and examining HTTP GET command and to detect ongoing DDoS attack by setting a threshold value of packets from a source address. Necessary actions can be taken once detected. Implementing on Web interface using **Python** and **Django**.
- Web App URL: <https://ddos-detection.herokuapp.com>

Simulation of MPLS Label Distribution Protocol using GNS3

March 2017

- This Project is about Modeling and Simulation of MPLS based Networks using Network simulation tool GNS3. It helps in clear understanding of MPLS Label Distribution Protocol and evaluate MPLS based networks over IP networks.

Socket Programming: Building a Chat Server and Client using sockets

November 2016

- Created a client server chat application where multiple clients send data to server which collects data and replies them accordingly (Multi-threading). Implemented it in **Python** and **Python GUI Tkinter**.

Firewall Implementation

October 2016

- We have successfully implemented packet-filtering based firewall using BSD Socket Programming in **Python** on Linux Machine. It is programmed in such a way that it can block packets of any protocol, IP address and can block all the packets destined to Port number on the machine.