

EDUCATION

UNIVERSITY OF MARYLAND

MS Telecommunication Engineering 2017

KJ SOMAIYA COLLEGE OF ENGINEERING

BE Electronics Engineering 2015

EMPLOYMENT

VT IDIRECT

System Architecture Engineering

Herndon, Virginia
May 2016 to Aug 2016

- Quality of Service assessment in iDirect TDMA VSAT networks
 - Created test suites in a simulated environment with various QoS parameters to establish a performance baseline
- Analysis of TDMA slot assignment algorithm
 - Evaluated pattern of slot allocations with varying remote and carrier definitions to debug and aid in recommending optimizations to the algorithm
- Study of high-level iDirect network architecture

CERTIFICATIONS

CISCO CERTIFIED NETWORK ASSOCIATE : ROUTING AND SWITCHING

License Number: CSC013063506

PROJECTS

DEPLOYMENT OF SCALABLE CLOUD USING AMAZON WEB SERVICES

Sep 2016 to Oct 2016

- Experimented with Test Drive Enterprise Solutions on AWS
- Launched a Virtual Private cloud and deployed a number of Amazon EC2 instances with varying specifications in it
- Analyzed the functioning of various AWS features like Auto-Scaling, Elastic Block Storage, Load Balancer, Amazon CloudWatch, S3 etc
- Illustrated third party applications like OpenVPN and VYoS to demonstrate day-to-day applications of cloud services

PROJECT ON TWO STATE KALMAN FILTER

Apr 2016

- Developed a Two state Kalman filter in MATLAB that tracks the movements of a simulated vehicle moving along a highway
- Predicted the location and velocity of the vehicle successfully using acceleration values arriving at periodic intervals based on Newtons Laws
- Successfully updated the prediction values with the help of a more accurate GPS observation updates arriving at random times thus obtaining near accurate parameters of the vehicle

PROJECT ON GSM/LTE NETWORK COVERAGE ANALYSIS USING MENTUM PLANET 5.7

Oct 2015

- Implemented the project in several phases to perform LTE deployment
- Obtained network coverage in Downtown DC and nearby suburban areas by designing a network using 30 base stations in phase 1 and 2
- Regulated antenna parameters such as down tilt, power, azimuth to get optimum coverage and to avoid drops if any

UDP PROTOCOL IMPLEMENTATION IN JAVA

Nov 2015

- Implemented a networking Java application consisting of a transmitter and a receiver using User Datagram Protocol sockets
- Ensured the reliability of data using timers, retransmission policies and integrity check algorithm
- Achieved cryptographic authentication using RC4 Algorithm

CISCO CERTIFIED NETWORK ASSOCIATE TRAINING

Jul 2015

- Analysed and performed tracing in virtual network environment using Cisco Packet Tracer
- Gained proficiency in sub-netting and addressing in IPv4 and IPv6

FINAL YEAR ENGINEERING PROJECT- SELF BALANCING ROBOT

Aug 2014 to May 2015

- Collaborated with three team mates for structuring the self- balancing robot based on unicycle mechanism using AT89C51 microcontroller and IR sensors
- Designed a 3 layered model by calibrating the centre of gravity using mechanical principles

SKILLS

LANGUAGES: Java , C, MATLAB**PROTOCOLS KNOWLEDGE:** RIP, OSPF, TCP, UDP, IGRP, EIGRP, DHCP**SOFTWARES AND OS:** Cisco Packet Tracer Student, Eclipse, Mentum Planet 5.7, Code Blocks, Linux, MS Office

ACTIVITIES

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS COUNCIL · Joint Publicity Head

2013 to 2014

- Led a team of 9 people in carrying out various publicity responsibilities
- Supervised the organization of the IEEE technical and cultural festival for an academic year

INDIAN CLASSICAL DANCE : BHARATNATYAM

2004 to 2012