

KHUSHBOO NIGAM

8125, 48TH AVE, APT 520, Parkside, College Park, (240) 825-7001, khushboo2243@gmail.com

Education

University of Maryland, College Park, MD

M.S. Telecommunications Engineering (Computer Networks/Network Engineering) (Expected May 2018)

GPA: 3.57/4

Coursework: - Networks and Protocols (Advanced), Network Programming, Distributed Systems in a Virtual Environment, Introduction to Cellular Communication Networks

Jaypee Institute of Information Technology, Noida, India

B.Tech Electronics and Communication (July 2011- July 2015)

GPA: 8.3/10

Coursework: - Mobile Communications, Telecommunication Networks, Introduction to Computers and Programming (Programming in C), Object Oriented Systems and Programming (Programming in JAVA)

Technical Skills

Programming languages	C(Practitioner), Python(Practitioner), JAVA(Moderate), SQL(Moderate), C++(Basic)
Operating System	Windows, Ubuntu Linux
Software Expertise	Frontline Analytic Solver, VMware Workstation, VMware vSphere, Microsoft Visual Studio, MS Office
Networking Protocols	TCP/IP, OSPF, BGP, RIP, EIGRP
Networking Tools	Cisco Packet Tracer, Wireshark, Putty

Academic Presentation and Projects

- Worked on project- **IP & Domain Dossier System** (November 2016- December 2016)
An iterative Domain Name Server using text file fostering the domain and IP Database
 - Implemented DNS over TCP/IP and Server-Client communication using Socket Programming in C
 - Implemented Linked List data structure in C for storing domain name, IP address.
 - Implemented log file at the server indicating requesting client IP and time of access
 - Used Ubuntu Linux environment on virtual machines (built on VMware Workstation)
- Designed **SNMP (Simple Network Management Protocol) monitor** (October 2016- November 2016)
 - SNMP monitor is a client side application which allows monitoring of system variables presented to it in form of MIB OIDs
 - Polled multiple SNMP enabled Virtual Machines (built on VMware Workstation) running Ubuntu server gathering runtime statistics

Work Experience

Jaypee Institute of Information Technology, Noida, India

Research Assistant (July 2015- January 2016)

- Engineered a way to reduce the complexity of Partial Transmit Sequence (PTS), which is a widely used scheme for OFDM
- Implemented modified Partial Transmit Sequence scheme with improvised CCRR values

Bharat Electronics Limited, India

Technical Intern (July 2014-August 2014)

- Learned concepts to install, operate and troubleshoot enterprise networks
- Included connecting to a WAN, routing & switching, TCP/IP configuration, IP addressing, determining IP routes, managing IP traffic and establishing point-to-point connections

Bharti Airtel, India

Technical Intern (June 2014-July 2014)

- Studied the basics of a GSM system and its architecture which revolutionized communication
- Gained knowledge about aspects of GSM such as hand off, Frequency-reuse, building blocks of GSM architecture: MSC, BSC

Publications

- "Grouping and Mirror Image PTS for PAPR reduction in OFDM System" in (AET-AEE 2015). Published in McGraw Hill and Indexed in GRENZE (Grenze ID: 02.AET.2015.6.33)
- "Iterative-Grouping and Image PTS for PAPR Reduction in OFDM System" in SPIN-2016, sponsored by IEEE

Honors and Achievements

- Ambassador for **TSAN (Telecommunications Student Alumni Network), UMD** (August 2016- Present)