Kashish Singh

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EDUCATION

- **North Carolina State University,** Raleigh, NC
  Master of Science in Computer Networking, GPA 3.7/4   Expected May 2021
- **Ramrao Adik Institute of Technology, Mumbai University**, INDIA
  Bachelors in Electronics and Telecommunication Engineering, GPA 9.13/10   May 2017

GRADUATE COURSEWORK

- Linux Networking
- Design and Analysis of Algorithms
- Switched Network Management
- Advanced Internet Protocols
- Internet Protocol
- Routed Network Design

TECHNICAL SKILLS

- **Languages:** Python, Java, Xml, SQL, Bash, Ansible, HTML, JSON, YAML   **Database**: MySQL
- **Operating System**: Windows(XP/Vista/7/8/10), Linux-Ubuntu, CentOS.
- **Tools :** Node-RED, Wireshark, WinSCP, Netfilter, Iptables, GIT, Openstack, GCP, AWS VPC, TIBCO BW, paramiko
- **Virtualization :** KVM, QEMU, libvirt, micro services Virtualization, Docker, Kubernetes, Container, VxLAN, GRE
- **Networking technologies :** Ethernet, TCP/IP**,** OSI, UDP, OSPF, DNS, LAN, DHCP, VLAN, STP, FTP, VPN

PROFESSIONAL EXPERIENCE

Reliance Jio Infocomm Ltd | Mumbai, India   July 2017 - June 2019
Title: Software Engineer

- Co-ordinated in Training, implementing, configuring and verifying the virtualized network devices deployed for providing L2 network connectivity using NVO3 VxLAN tunneling architecture approach.(Automated Virtual network)
- Implementation of TIBCO and Java based services of Customer (250 million) order and number management services.
- Worked in Q-labs architectural functionalities of network virtualization, Bluetooth low energy, 4G Volte, Data over LTE in R&D department.
- Developed Tibco based Integrated telecom services leveraging TIBCO BW and BE softwares, orchestrating entire order to activation flow for a telecom industry.

PROJECTS

- **CDN as a service in Virtual private cloud(VPC) using Ansible, Python and Bash on Linux**   Aug 2019- Dec 2019
  - Developed Containers and Virtual machines to create servers of Content distribution network(CDN) for tenants on their hypervisors by interconnectivity using overlay technologies of VxLAN and GRE.
  - Kubernetes based self healing and load balancing features to continuously check health of containerized environment.
  - Container deployment and Kubernetes orchestration technologies at scale to include service discovery, deployments, monitoring, scheduling, load balancing features along with VPC creation.

- **Peer to Peer with Distributed Index system**   Aug 2019 – Sept 2019
  - Implemented Centralized and P2P File Distribution system like Bit-torrent system over a TCP network forming a star topology LAN network of different peers containing files with a Registration server and to check the performance.
  - Implemented Multi-threading and linked list concepts by utilizing socket programming to facilitate file transfer peers.

- **Point-to-multipoint reliable data transfer protocol**   Oct 2019 – Nov 2019
  - P2MP-FTP reliable data transfer protocol using the Stop-and-Wait automatic repeat request (ARQ) scheme.
  - Buffering and managing data received from, or to be delivered to, multiple destinations using UDP transport protocol.

- **Customer order Management service (250 million customers)**   Feb 2018 - June 2019
  - Implemented intercommunication between telecom systems enhanced by Enterprise service buses and Business events orchestration software of TIBCO BW and TIBCO BE.

- **BLE based universal remote(HOME AUTOMATION)**   Oct 2016 – Feb 2017
  - DTMF, Bluetooth low energy, PSOC, ESP8266 phant server based IoT system controlled by WSN Co-Ordinator.