### Saurabh Sharma

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## **Profile Summary**

Software Engineer with 14+ years of experience in C/C++ development on Linux, specializing in virtualization, telco-cloud, and cloud networking platforms. Proven expertise in packet processing, ACLs, AAA, TLS, and firewall concepts. Hands-on with KVM, ESXi, DPDK, OVS, delivering scalable, secure, and high-performance solutions across routing platforms, SDN controllers, and virtualized routers. Recognized with multiple employee awards for innovation, quality delivery, and cross-team collaboration

### **Core Skills**

**Programming**: C (expert), C++, Python (intermediate), C#

Networking: TCP/IP stack, L2–L7 protocols, ACL, AAA, TLS, packet processing, firewall concepts

Virtualization/Cloud: KVM, ESXi, DPDK, OVS, VMware, Containers

**Operating Systems**: Linux (Ubuntu, CentOS, RHEL), Windows **Tools**: Git, JIRA, Valgrind, Coverity, Flame Graph, Meson Build **Soft Skills**: Technical leadership, mentoring, cross-team collaboration

## **Professional Experience**

Ciena Networks | Software Engineer - 4 | Jan 2024 - Present

- Developed **AAA** authentication and **NAS** IP features for multi-container router platforms
- Optimized performance and fixed memory leaks using Valgrind and Flame Graph
- Refactored event-handling logic, cutting memory footprint by 5x and enhancing throughput/performance under load

**Impact**: Reduced authentication-related issues by ~25% and improved system stability for high-performance routing platforms

# Nokia Networks (Nuage VCS - SDN Platform) | Technical Specialist | Sept 2019 - Dec 2023

- Designed and delivered features like **traffic mirroring** and **dual FIP**, enhancing visibility and multi-homing
- Worked on **network virtualization** across VMs, containers, and bare metal systems
- Partnered with QA, DevOps, and support to ensure on-time, high-quality releases

**Impact**: Improved customer troubleshooting efficiency and enabled more resilient network connectivity for telco-cloud deployments

# Juniper Networks (Virtual MX Platform) | Software Engineer 3 | Jun 2015 - Sept 2019

- Built **virtualized MX/PTX routers (vMX)** running on **KVM and ESXi**, replicating real router features in cloud environments
- Integrated **DPDK/i40e drivers** for high-performance packet I/O
- Implemented dual RE and multi-FPC support on Ubuntu platforms

**Impact**: Enabled Juniper's customers to deploy routing in cloud-native environments, reducing CAPEX by eliminating hardware dependencies

# Samsung India (SRI-B) | Lead Engineer | Apr 2011 - May 2015

- Developed **IPC layers** for mobile platforms, improving bandwidth and stability
- Implemented **RIL** (**Radio Interface Layer**) enabling WiFi Calling on Windows Mobile OS
- Built POCs for WiFi Display (Android) and SmartStay (Windows Phone)

**Impact**: Drove **first-of-its-kind global innovation** with WiFi Display, contributed to flagship features like WiFi Calling and SmartStay that enhanced Samsung's competitive edge.

# Aricent Group | Software Engineer Trainee | May 2010 - Mar 2011

- Contributed to **2G GSM-GPRS OMCR functions** billing, alarms, and NE management
- Supported build and release automation in C, C++, Perl, and Core Java

# **Awards & Recognition**

- **Nokia Employee Award** (2021) Recognized for delivering critical SDN virtualization features (*traffic mirroring & dual FIP*) ahead of schedule, significantly improving customer adoption
- Half-Yearly Award (Samsung, 2014) Honored for successful WiFi Calling feature delivery and outstanding onsite RIL support
- Spot Award (Samsung, 2013) Awarded for delivering the SmartStay feature without SoC vendor support, ensuring a bug-free release

# **Education**

- Master of Computer Applications (MCA) UP Tech University, Lucknow | 75%
- **Bachelor of Computer Applications (BCA)** Agra University, Agra | 80%

#### **Achievements & Contributions**

- World-first innovation: Paper presentation and POC demo of WiFi Display at Samsung, later adopted globally.
- Active problem solver on **HackerRank & LeetCode** (focus on algorithms and data structures)
- Consistently recognized for **mentoring junior engineers** and driving cross-team collaboration
- Delivered multiple **virtualization and SDN features** that directly improved customer adoption and system performance.