Shubhro Sinha

linkedin.com/in/shubhrosinha Bengaluru, Karnataka

SUMMARY

A technology enthusiast with 14+ years of experience in Networking, Operating Systems, Cloud and Distributed systems

TECHNICAL SKILLS

• Languages: Go, C Technologies: Linux, TCP/IP, Docker, DPDK, OVS, Electron

EXPERIENCE

• Nuage Networks From Nokia

Bengaluru, KA

Jan 2020 - Present

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Mobile 2: +91-8217460442

 $Senior\ Technical\ Specialist$

- Nuage VNS: Nuage Networks Virtualized Network Services (VNS) delivers SD-WAN 2.0 functionality that allows seamless connection across branch offices and data centers. I am part of the data-plane team and am instrumental in developing features/applications like
 - * Forward Error Correction
 - * Seamless forwarding of Non-Ethernet frames over overlay networks
 - * Containerization of Nuage Services Gateway(CPE) to run on public clouds
 - * Encapsulating non-Ethernet frames so that they are passed over the overlay networks
 - * Exploring new technologies like XDP/VPP to replace DPDK

• Ionos Networks Inc./IPCore Solutions Pvt. Ltd

Bengaluru, KA

Cloud Dataplane Lead/Architect

Nov 2014 - Dec 2019

- Quantum File Transfer(QFX): QFX is a file/directory sync solution that can operate at Gigabit speeds over intercontinental distances. The software is built to scale to tens of million files and tens of terabytes of data. I was responsible for architecture of the data-plane and led a small team of engineers to develop software for
 - * Multicast secure file/directory sync using high speed data transport over TCP/IP
 - * Dynamic path detection, healing and Congestion Control
 - * Network resource allocation, management, fault tolerance and resiliency
 - * Client apps on MacOS and Linux to replace CPEs
 - * Develop up a docker based upgrade mechanism to upgrade CPEs

• CSR India Pvt. Ltd Senior Software Engineer

Bengaluru, KA

Jan 2013 - Nov 2014

o CSR's Synergy Wi-Fi Software Stack – A Wi-Fi Soft-Mac solution:

* 802.11ac Wi-Fi driver using mac802.11 Linux stack over PCIe

- * Requirement analysis, design and development of Wi-Fi features like scanning, 802.11d and 802.11h
- * Various bug fixes related 802.11 MAC in software Stack

• Sandvine India Pvt. Ltd.

Bengaluru, KA

May 2012 - Dec 2012

- $\circ\,$ Sandvine's Signaling Controller A PCRF cum diameter switch:
 - * Modification and Enhancement of Linux Virtual Server (LVS) module to support SNAT and DNAT traffic.

• Brocade Communications India Pvt. Ltd.

Bengaluru, KA

Software Engineer II

Sr. Engineer

Apr 2011 - May 2012

- Brocade's Project Mercury Brocade's first chassis based Ethernet Switch:
 - * Developed a dynamic Kernel Module Tracing Infrastructure to profile various kernel calls.
 - * Developed a process sandboxing framework to protect system against malicious programs.

• Mindtree Ltd.

Bengaluru, KA

Module Lead/Sr. Engineer/Engineer

o Embedded Software Practice:

- * Design and Development of SIP based 2-way Video Conferencing feature on Android
- * DRTL Implementation of a deadline aware scheduler, Deadline aware locking, and deadline ware interrupt handling in the linux kernel
- * Remotification of WiFi driver companion application and driver enhancements for a series of Wi-Fi chipsets
- * Development of Linux device drivers for Touch screen controllers on Atmel AT91SAM9261/AT91RM9200 platform. (I2C, SPI, GPIO)

EDUCATION

• Birla Institute of Technology and Science

Bachelor of Engineering in information Technology; 81.2%

Master of Technology in Software Systems(Work Integrated Learning Program); CGPA: 8.10

Bengaluru, KA

Howrah, WB

Jul. 2017 - Jul. 2019

Jul 2007 - Apr 2011

• Bengal Engineering and Science University, Shipbur (now IIEST, Shibpur)

Aug. 2003 - July. 2007

• Holy Mission High School CBSE - AISSCE(XII); 84%

Samastipur, BR

2001

• Central Public School

CBSE - AISSE(X); 85%

Samastipur, BR

1999

Publications and Presentations

- "Deployment Specific Real Time Linux" on 23rd Sep, 2009 at the 1st LinuxCon in Portland, OR, USA
- "An Efficient Technique for Enhancing Forensic Capabilities of Ext2 file system" at the 7th Annual Digital Forensic Research Workshop in Pittsburgh, PA, USA.

ACHIEVEMENTS/REWARDS

- 1. Outstanding performer of the year 2008-09
- 2. Half-yearly award 2008
- 3. Topper in campus learning program conducted by MindTree Ltd
- 4. School Topper in AISSCE-2001
- 5. Awarded National Scholarship for getting All India Highest in Science in AISSE 1999