# Shubhro Sinha

linkedin.com/in/shubhrosinha Bengaluru, Karnataka

#### SUMMARY

Linux programmer with 14+ years of experience in Networking, OS, Cloud and Distributed systems

#### TECHNICAL SKILLS

• Languages: Go, C

Technologies: Linux, TCP/IP, Docker, DPDK, OVS, Electron

#### EXPERIENCE

### • Nuage Networks From Nokia

Bengaluru, KA

Senior Technical Specialist

Jan 2020 - Present

Email: shubhro22@gmail.com

Mobile1: +91-9986619004

Mobile 2: +91-8217460442

- 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 OVS-DPDK

### • Ionos Networks Inc./IPCore Solutions Pvt. Ltd

Bengaluru, KA

Cloud Dataplane Lead

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
  - $\ast$  Client apps on MacOS and Linux to replace CPEs
  - \* Develop up a docker based upgrade mechanism to upgrade CPEs

## • CSR India Pvt. Ltd/Qualcomm India Pvt. Ltd.

Bengaluru, KA

Senior Software Engineer

Jan 2013 - Nov 2014

- Synergy WiFi Stack: I was responsible for requirements analysis, design and development for mac802.11 based driver for an 802.11AC chip
- Sandvine India Pvt. Ltd.

Bengaluru, KA

Sr. Engineer

May 2012 - Dec 2012

- Sandvine's Signaling Controller: 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

Apr 2011 - May 2012

 Brocade's Project Mercury: Developed a dynamic Kernel Module Tracing Infrastructure to profile various kernel calls.

• Mindtree Ltd.

Bengaluru, KA

Jul 2007 - Apr 2011

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 aware 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

Jul. 2017 - Jul. 2019

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

Howrah, West Bengal Aug. 2003 – July. 2007

• Holy Mission High School CBSE - AISSCE(XII); 84% Samastipur, Bihar 2001

Samastipur, Bihar 1999

• Central Public School CBSE - AISSE(X); 85%

### 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