Shankar Krishnamurthy Principal Architect

Mobile: 214-924-5560 Email: shankar.krishna@gmail.com

San Francisco Bay Area, CA

SUMMARY:

Partnering with businesses and leaders to design, deliver and maintain quality software and help convert their vision into great software products that customers love. Namely,

- SW Design/Implementation/Test: Product Ease-Of-Use; Keeping it simple and intuitive
- o SW Performance: Squeezing the system to its very last cycle and then some more
- SW Debugging: Serving as last line of defense for solving complex issues

Experienced (18+ years) Engineer/Architect who can add value in the following areas:

- Infrastructure/Platform Software Architecture (powered by Linux/OpenSource)
- o Virtualization, HA Virtual Appliances/Platforms in Software Defined DC. (KVM, Xen)
- o Container based Microservices, Container Orchestration (Docker, Kubernetes)
- o Networking (L2-L7), SDN, Load Balancer DataCenter Switches, ADC
- o Cloud Technologies Public/Hybrid Cloud (AWS), SaaS
- o System Software Linux Kernel, Drivers, Libraries, Daemons
- Embedded Systems/SoC, Mobile and Distributed Systems
- ASIC SDK, Integration and Board/SoC Bringup
- o Integrate BIOS, LOM, Hypervisor, OS, etc on x86 hardware from scratch
- Extreme automation/Devops with CI/CD (Jenkins, Vagrant, Ansible and Terraform)
- Network Drivers (Intel, mellanox), Storage and SSL offload (Cavium, Intel)

EXPERIENCE: Principal Architect Citrix Systems inc, Santa Clara (Jan '15 -)

- Building Virtual Platforms and Appliances for Networking/Cloud Infrastructure
 - Drive the engineering of a complete virtualized appliance from requirement gathering, design, coding to manufacturing/release. Build consensus and Integrate new features and software (including new drivers for new vendor components) into the overall Netscaler ADC product and render seamless experience for the customers and help customers succeed in their business.
- Work on new framework development, integration, debugging, performance and manageability of the platform software (open source based)
- Troubleshoot complex customer issues not only on-premise appliance but also cloud environment (private and public clouds/aws etc)
- Work on system-side performance analysis (application + kernel) and improvement under various platform deployment (host + guest) use cases.

EXPERIENCE: Principal Engineer, Ericsson inc, San Jose, CA (Jan '12 -Jan '15)

- Architect and Lead Platform/Linux Kernel Development for Industry unique ASIC/NPU/ CPU.
 - Worked on Linux SMP Kernel S/W Bringup on new Architecture (1100+ cpus) -Navigating ELF/ABI/Toolchain on New Instruction Set architecture. Worked on Infrastructure and System software - Linux Kernel, Modules, Daemons, Libraries, etc

- Worked on Platform/Linux Kernel/Infrastructure development for next-gen networking platform for cloud.
- Hands on experience in developing frameworks and architecture in networking infrastructure including simulation platforms for networking.
- Trouble shooting and debugging complex kernel/application issues and performance bottlenecks in ericsson networking chassis.
- Define scope, lead and technically guide junior members and tech leads

EXPERIENCE: Technical Leader, Cisco Systems, San Jose, CA (Apr '10-Jan '12)

- Built linux system software for datacenter switch nexus7000
 - Worked on HA infrastructure system software that is responsible for active-standby sync, failure detection, fault isolation - paving the way for hit-less switchover / upgrades that helps reduce maintenance outages and traffic disruption.
- Design, develop and maintain high availability(HA) infrastructure components with fault tolerance (FT) and h/w redundancy in virtualized Networking switches.
- Developed and maintained various components including linux networking kernel modules and Userspace libraries in x86 and ppc arch. Also maintained linux kernel networking drivers.
- Hands on experience with Linux Virtualization (kvm, xen, etc), lxc and control groups, .
 Involved in proof-of-concept and prototyping of IPC under virtual environment.
- Did scripting using bash/perl. Responsible for helping and mentoring junior members.

EXPERIENCE: Member of Technical Staff, Wind River Inc/Intel, California (Jun '08-Apr '10)

- Worked on framework that enables customers to upgrade and fix problems without downtime and maintenance window.
 - Design, Develop and maintain components of Dynamic software modification
 - Familiar with ELF/ABI and tool chain-kernel interactions and tradeoffs. Eclipse/Java IDE and plugins are used to support the product
 - Hands-on experience in debugging complex system issues across the stack including compiler, kernel, drivers, modules as well as user space libraries/executable.

<u>EXPERIENCE</u>: Sr. Staff Software engineer, **Motorola Inc,** Sunnyvale, CA (Aug'04–Sep'07) Developed Embedded Linux system software for 1st linux phones for US market.

• Designed, developed and coded core multi-threaded system software for next generation linux-Java Motorola mobile devices

<u>EXPERIENCE</u>: Sr. Software Engineer - **Wipro Technologies**, Bangalore/US (July '99-Dec '01) Embedded Real-Time software development for Fujitsu's optical add-drop multiplexer product.

• Embedded software programming in real-time operating system (pSOS).

EDUCATION:

MS in Computer Science, University of Texas, Dallas.

B E. (May 1999), National Institute of Technology (formerly REC), Trichy, INDIA