RAVI KUMAR REDDY K

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SUMMARY:

- Software Developer with extensive experience of 7+ years in developing System Platform Software, Network Datapath, Applications and Tools for On-Premises and Virtual Next Generation Firewalls (NGFW), Switches and Access points.
- Extensive Experience in Cloud Computing, Virtualization, Linux Internals, Software Architecture, and comprehensive understanding of latest technologies.
- In-depth knowledge of Layer 2, Layer 3 and Layer 4 networking, SSL Applications and Firewall Features.
- Hands-on experience in design, configuration, development and troubleshooting of firewalls, routers, switches of different vendors.

SKILLS & TECHNOLOGIES

- C, Python3, Bash, JavaScript, REST, JSON, XML, Terraform
- AWS, Azure, GCP, Oracle Cloud (OCI), Alibaba Cloud, VMware, KVM
- TCP/IP, Network Security NAT, High Availability, SSL/TLS, VPN, Routing and Switching
- Git, Perforce, Jira, Confluence, Target Process, CDETS, Agile, Windows, Linux

EMPLOYMENT

Software Engineer III   **Cisco Inc.**   **August 2020 – Till Date**

- Designed and developed a unified solution to support **horizontal autoscaling** for ASAv deployments in Alibaba Cloud using Python3 and Terraform.
- Worked on adding support to **Broadcom NetXtreme and Mellanox Connect X-5 (MLX5 –DPU Cards)** virtual nic cards for Cisco ASAv and FTDv deployments in Oracle Cloud Infrastructure (OCI) as part of SR-IOV support.
- **Improved performance** by 110000 CPS and of Cisco ASAv and FTDv deployments in KVM, Alibaba Cloud OCI Platforms by adding Multiqueue with RSS support for i40E and i40evf network drivers and Intel XL710 Network Cards.
- Worked on **several performance and crashing issues** with ASAv/NGFWv deployments in various cloud platforms.
- Resolved several **NIC Underruns, Interface Hot Plugging Support, Core Dump Issues, Memory Leaks, Low CPS/PPS** issues on ASAv deployments in KVM and VMware platforms.
- **Migrated Virtual firewall deployments in Azure** from Python2.7 to Python3.9 using Azure Linux Agent.
- Resolved various issues as part of upgrading underlying Wind River Linux OS Upgrade.
- Collaborated with other Engineers on pipeline creations, code reviews, functional specification reviews and process enhancements.

Software Development Engineer   **Red Piranha**   **May 2020 – August 2020**
- Developed features for Crystal Eye, a network operating system running on firewalls, such as SSLVPN Module such as LDAP Integration, Static IP setups, SSL Perceive and Bump and so on in Linux based Virtual Firewalls.
- Designed system specification for various features of SSLVPN.
- Collaborated with colleagues on code reviews via Git, test cases, documentation, and general process enhancements.

Software Development Engineer   **SonicWall Inc.**   **June 2015 – April 2020**
- Developed a solution to integrate SonicWall **Switches with Firewalls** to give granular monitoring on every end-user through a single management interface.
- Developed CLI and API interfaces to configure Flow Reporting, ARP Storm Limit and AWS Integration of Firewalls.
- Designed and developed **log analyzers** namely TSR Analysis Tool, EXP Viewer that parses various sections of log files using Python3 and Regular Expressions.
- Developed Migration Tool using Python3 for customers of other vendors namely, Cisco, Check Point, Juniper, Fortinet, Palo Alto, and so on to migrate easily to SonicWall. URL: https://migratetool.global.sonicwall.com

EDUCATION

- **Master of Technology** in Software Systems – Security from **Birla Institute of Technology and Science (BITS).** 2021 – 2023
- **Bachelor of Engineering** in Computer Science & Engineering from **Visvesvaraya Technological University.** 2011 – 2015

CERTIFICATIONS & COURSES

- Oracle Certified Cloud Infrastructure Foundations Associate (Feb 2022)
- SonicWall Network Security Administrator (SNSA – License # bd75d8d8051084bcbcf26328e7caff60)
- Linux Kernel Debugging, Device Drivers, Process Management, Scheduling and Memory Management. (Cisco Internals)