

# RAVI KUMAR REDDY K

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## SUMMARY:

- Software Developer with extensive experience of 6+ years in developing System Platform Software, Network Datapath, Applications and Tools for On-Premises and Virtual Next Generation Firewalls (NGFW), Containerized Firewalls (ASAc), 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, SSLApplications and Firewall Features.
- Hands-on experience in design, configuration, development and troubleshooting of firewalls, routers, switches of different vendors.

## SKILLS & TECHNOLOGIES

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

## EMPLOYMENT

Software Engineer III	Cisco Inc.	August 2020 – Till Date
<ul style="list-style-type: none"><li>• <b>Data path specialist</b> for ASAv and FTDv virtual firewall deployments in AWS, OCI, GCP, Azure, KVM and VMWare in both form factors - Containers/Virtual Machines.</li><li>• Worked on adding <b>SRIOV support</b> for Cisco ASAv and NGFWv deployments in Oracle Cloud Infrastructure (OCI)</li><li>• Worked on adding support to <b>Broadcom NetXtreme Adapters</b> for Cisco ASAv and FTDv deployments in Oracle Cloud Infrastructure (OCI).</li><li>• <b>Improved performance by 110000 CPS and of</b> Cisco ASAv and FTDv deployments in KVM, Alibaba Cloud OCI Platforms by adding <b>Multiqueue with RSS support</b> for i40E and i40evf network drivers and Intel XL710 Network Cards.</li><li>• Resolved several <b>NIC Underruns, Interface Hot Plugging Support, Core Dump Issues, Memory Leaks, Low CPS/PPS</b> issues on ASAv deployments in KVM and VMware platforms.</li><li>• Migrated Virtual firewall deployments in Azure from <b>Python2.7 to Python3.9</b> using AzureLinuxAgent.</li><li>• Resolved various issues as part of upgrading underlying WindRiver Linux OS Upgrade.</li><li>• Collaborated with other Engineers on code reviews, functional specification reviews and process enhancements.</li></ul>		
Software Development Engineer	Red Piranha	May 2020 – August 2020
<ul style="list-style-type: none"><li>• 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.</li><li>• Designed system specification for various features of SSLVPN.</li><li>• Collaborated with colleagues on code reviews via Git, test cases, documentation, and general process enhancements.</li></ul>		
Software Development Engineer	SonicWall Inc.	June 2015 – April 2020
<ul style="list-style-type: none"><li>• Developed a solution to integrate SonicWall <b>Switches with Firewalls</b> to give granular monitoring on every end-user through a single management interface.</li><li>• Developed CLI and API interfaces to configure Flow Reporting, ARP Storm Limit and AWS Integration of Firewalls.</li><li>• Designed and developed <b>log analyzers</b> namely TSR Analysis Tool, EXP Viewer that parses various sections of log files using Regular Expressions.</li><li>• Developed Migration Tool for customers of other vendors namely, Cisco, Check Point, Juniper, Fortinet, Palo Alto, and so on to migrate easily to SonicWall. URL: <a href="https://migratetool.global.sonicwall.com">https://migratetool.global.sonicwall.com</a></li></ul>		

## EDUCATION

- **Master of Technology** in Software Systems – Security from **Birla Institute of Technology and Science (BITS)**. 2021 – 2022
- **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)