RAVI KUMAR REDDY K

+91-7411340221 • [ravikumark815@gmail.com](mailto:ravikumark815@gmail.com) • [LinkedIn](https://www.linkedin.com/in/ravikumark815) • [GitHub](https://www.github.com/ravikumark815)

|  |  |
| --- | --- |
| **SUMMARY** | * Software Developer with extensive experience of 6+ years in developing System Platform Software, Network Datapath, Applications and Tools for On-Premise and Virtual Next Generation Firewalls (NGFW), Switches and Access points. * Proficient in software architecture, 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 and email security appliances of different vendors. |
| **SKILLS** |  |
| Languages | C, C++, Python3, Bash |
| Public Clouds | AWS, OCI, Azure (Beginner), GCP (Beginner) |
| Private Clouds | KVM, VMWare |
| NFV | Intel DPDK Framework, Datapath Performance Optimization, VxWorks on BSPlib (Beginner) |
| Web | REST, JSON, XML, Regular Expressions, HTML, CSS, JavaScript |
| Tools | vSphere 6.5, Agile, Jira, Confluence, Target Process, CDETS, Coverity, Git, Perforce, Gerrit, Linux, Windows |
| Networking | Layers – 2,3,4, TCP/IP, NAT, Policy Based Routing, Content Filtering, High Availability, SSL, LDAP, RADIUS, IPSec, VLANs, 802.1x, STP and so on |
| **EXPERIENCE** |  |
| **CISCO INC.** | **Software Engineer III** *(August 2020 – Present | 1Year 3 Months)* |
| Cloud and Virtualization | * Worked on **Intel DPDK/NFV Architecture** for Deep Packet Inspection in Cisco ASAv and NGFWv (FTDv) firewalls, which detects threats and responds dynamically. * **Data path** specialist for various Public clouds mainly AWS, OCI, GCP, Azure and Private clouds including KVM and VMWare for drivers used in form factors Containers/Virtual Machines for Cisco ASAv and NGFWv firewalls. * Worked on adding **SRIOV support** for Cisco ASAv and NGFWv deployments in Oracle Cloud Infrastructure (OCI). * Worked on adding support to **Broadcom NetXtreme Adapters** for Cisco ASAv and NGFWv (FTDv) deployments in Oracle Cloud Infrastructure (OCI). * **Improved Performance of SMP systems** mainly Cisco ASAv in KVM and OCI Platforms by adding **Multiqueue with RSS support** for i40E and i40evf network drivers and Intel XL710 Network Cards. * Resolved several **NIC Underruns, Mbuf issues, Low CPS/PPS** (Connections per second or Packets Per Second) issues on ASAv deployments in KVM and VMware platforms. * Collaborated with other Engineers on code reviews, functional specification reviews and process enhancements. Facilitated problem diagnosis and prompt resolution for issues reported by customers. |
| **RED PIRANHA** | **Software Development Engineer** *(May 2020 – August 2020 | 3 Months)* |
| Crystal Eye | * 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. |
| **SONICWALL INC.** | **Software Development Engineer** *(June 2015 – April 2020 | 4Years 11 Months)* |
| SonicOS | * 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. * Resolved several issues with **Wire Mode Interfaces, Log Monitor**, Syslog Monitoring, FTP Logging, TSR Export and so on in SonicOS * Designed and developed **log analyzers** namely TSR Analysis Tool, EXP Viewer that parses various sections of log files using Regular Expressions and display output in a human-readable format. * Developed Migration Tool for customers of other vendors namely, Cisco, Check Point, Juniper, Fortinet, Palo Alto, WatchGuard and Sophos to migrate easily to SonicWall. *URL:* [*https://migratetool.global.sonicwall.com*](https://migratetool.global.sonicwall.com/) |
| **EDUCATION** | * **Master of Technology in Software Systems – Security** from **Birla Institute of Technology and Science (BITS).** *2021 – 2022, Current CGPA: 9.0/10* * **Bachelor of Engineering** in **Computer Science & Engineering** from **Visvesvaraya Technological University.** *2011 – 2015, CGPA: 7.3/10, accredited by World Education Services, Toronto, ON* |
| **CERTIFICATIONS & TRAININGS** | * Crystal Certified Network Engineer *(Red Piranha – April 2020)* * SonicWall Technical Master *(STM – March 2020)* * SonicWall Network Security Administrator *(SNSA – License # bd75d8d8051084bcbcf26328e7caff60)* * Certified SonicWALL Security Administrator *(CSSA - License # 54A9-2099-DE5E-4B52)* * Certified White Hat Hacker *(CWHH – Certified till Level 2)* * Certified Cisco Networking Associate *(Cisco Netacad)* * Linux Kernel Debugging *(Cisco Netacad)* * Linux Device Drivers *(Cisco Netacad)* * Linux Process Management and Scheduling *(Cisco Netacad)* * Linux Memory Management *(Cisco Netacad)* |
| **ACHIEVEMENTS** | * Cisco Connect Everything Recognition Award 2021 * Completed all Technical Tiers in SonicWall University FY’21 * SonicWall Outstanding Contributor for Q4 FY 2019 * SonicWall Key Contributor for FY 2018 * Won Q3 FY'16 Dell SonicWall Quarterly OSAT and NPS Championship Award * Won IBNC (Networking Championship) at Zonal Level conducted by Association for Computer Machinery (ACM). |
| **RESEARCH**  **PAPERS** | * “Detection of HTTP Based Botnets with Network Analyzers using Classifiers and Domain Name Filters” in International Conference on Engineering, Science, Management and Advances in Research Technology, 2015, ISBN: 2278-0181, IF: 1.76 * “Interfacing Automobiles with Smartphones” in National Conference on Green Computing Technologies (NCGCT), IJRET 2015, ISBN: 978-93-84935-31-3, IF:2.375 |