

Niranjan Nagaraju

CONTACT INFORMATION	No. 83, H. Colony, 2nd Cross, Indiranagar, Bangalore - 560038	<i>Mobile:</i> +91 9900400100 <i>E-mail:</i> niranjan.nagaraju@gmail.com
EDUCATION	Visvesvaraya Technological University , PES Institute of Technology, Bangalore <i>Bachelor of Engineering</i> , Computer Science	2002 – 2006
TECHNICAL SKILLS	Programming Languages: C(experienced), Python(proficient), C++(prior experience), Haskell(hobby) Tools: GDB, Vim, Emacs Operating Systems: Windows, Linux, Mac OS X Github: Link to Github Profile	
PROFESSIONAL EXPERIENCE	10 years of design and development experience in System Programming, Security, and TCP/IP Networking. Juniper Networks , Bangalore <i>Software Engineer</i>	October 2012 – Present
	<i>IPS (Intrusion Prevention Systems) for Juniper's SRX series</i> <ul style="list-style-type: none">• Switched IPS' security database backend from Berkeley-DB to SQLite3.• Integrated Intel's pattern matching engine, 'Hyperscan' into SRX-IPS.• Ported IPS and SSL forward-proxy modules to Intel/Linux-based Next-gen SRX devices.• Responsible for fixing high-priority customer issues.	
	RSA Security , Bangalore <i>Software Engineer</i>	October 2010 – October 2012
	<i>RSA Access Manager (AxM) Web Agents</i> <ul style="list-style-type: none">• Implemented features for Intersite Single Sign-on (ISSO).• Security audit of AxM Web agents using w3af/webscarab, Fortify and fixed critical security issues.• Worked on extending AxM Web Agents to support Email-based RSA Adaptive Authentication.	
	Narus Networks , Bangalore <i>Software Engineer</i>	June 2008 – March 2010
	<i>Multi-threading processing layer, 'Logicserver', for NarusInsight</i> <ul style="list-style-type: none">• Worked on the development of an actor-based concurrent programming language for a redesigned NarusInsight's processing layer, 'Logicserver'.• Profiling and performance tuning (using Oprofile and Valgrind) of the redesigned Logicserver component.	

SQL Loader, NarusInsight

- Developed a Narus component to load capture layer metadata into an SQL database using unixODBC library.

Packet Loader, NarusInsight

- Developed a Narus component to analyze capture layer events/data based on user-configured targets and write the matching packets to PCAP and ETSI compliant Metadata files.

CoreEl Technologies, Bangalore

Design Engineer

July 2006 – June 2008

TOE (TCP/IPv4 Offload Engine)

- Implemented a pseudo network device driver for a PCI-e based FGPA device emulating the TCP/IP stack in hardware.
- Design and implementation of a dual-stack architecture that enables switching between TOE and the Linux TCP/IP stack.

TIP6E (TCP/IPv6 Offload Engine)

- Implemented ICMPv6 NDP (Neighbor Discovery Protocol) and MLD (Multicast Listener Discovery) in software to be integrated with the rest of the IPv6 stack in the TIP6E hardware FPGA.

AWARDS AND
RECOGNITIONS

Juniper Networks

April 2016

Received a 'Department Spotlight Award' at Juniper Networks for resolving IPS accuracy issues reported during NSS Labs' Data-center tests on Juniper's SRX NGFW, in a very narrow time-frame.

Juniper Networks

May 2015

Our team (of three people) won 4th place at a BU-level 'Innovation Day' contest for our idea titled, 'Vulnerability Correlation for IPS'. The idea was to use the online CVE(Common Vulnerabilities and Exposures) database combined with some network information (machines, services running, etc) to improve SRX-IPS attack detection.

REFERENCES

Available upon request.