Aravind Prasad Sridharan

Phone: +91 9884612715
Email: raja.avi@gmail.com
Date of Birth: 17.09.1990
LinkedIn: linkedin.com/in/aravindprasads
GitHub: github.com/aravindprasad90

Career Summary

- 8+ years of Professional Experience in Software Development in DELL R&D.
- Published 5 Patents, 8 IETF Internet-Drafts and 2 Springer publications.
- Certified Scrum Master, 52915208011865.
- Extensive experience in C, C++, Python, Linux, Git with good knowledge of Data Structures, Algorithms and Software design.
- Developed Web Apps using Flask, Django and PHP as personal projects.
- Contributing regularly to Open-source projects like Open vSwitch (OVS), Radcli, Tcpdump, FreeRADIUS and Libradius.
- Regularly solving programming challenges and contests in Leetcode, Hackerrank, Topcoder and Codingbat.
- All Star Badges in Hackerrank (hackerrank.com/aravindprasad) and Codingbat Python (codingbat.com/aravindprasad).
- Contributed to RADIUS Wiki Page (wikipedia.org/wiki/RADIUS) and continuing to contribute to other Wiki pages.

Work Experience

DELL R&D Team   05/2011 – Present
- Developed Applications in C, C++ and Python and also used Opensource off-the-shelf software like Scapy, Glib, RADIUS libraries Radcli and Libradius wherever applicable during application development.
- Developed the SDN OpenFlow support on top of Open vSwitch (OVS) open-source codebase.
- Delivered the standalone RADIUS Client Application developed using the opensource codebases- Radcli and Libradius.
- Designed, developed multiple linux based applications from scratch like 802.1x, Private Vlans (RFC5517), ISIS and OSPF in DELL OS10 product.
- Initiated, spearheaded and transformed the entire application codebase to C++ and Python from C which greatly improved the maintainability and assisted in faster development and enhancements on the product. This effort triggered similar code transformations across various application codebases in DELL.

Education

- M.Tech, Software Systems, BITS PILANI, India   9.69/10   2013 - 2015
- B.Tech, Information Technology, MIT Anna University, India   8.83/10   2007 - 2011

Patents

- Handling of Route Installation Failures   US9794114B2
  (patents.google.com/patent/US9794114B2/en)
- Control message exchange optimizations   US 16/290626
- Port-based link selection in Spanning Tree application   US 16/290556
- Bridge-based link selection in Spanning Tree application   US 16/355181
- Trust based Power rationing for POE devices   US 16/705722

IETF Internet Drafts

- RADIUS End-to-end Security   tools.ietf.org/html/draft-aravind-radext-endtoend-attribute-security-00
- RADIUS Message Bundling   tools.ietf.org/html/draft-aravind-radext-message-bundling-00
- RADIUS Extended Identifier Attribute tools.ietf.org/html/draft-aravind-radext-extended-identifier-attribute-00
- RADIUS Attribute Security   tools.ietf.org/html/draft-aravind-radext-attribute-security-00
- ISIS Reason TLVs   tools.ietf.org/html/draft-aravind-isis-reason-tlv-00
- Data Confidentiality in IS-IS   tools.ietf.org/html/draft-aravind-isis-confidentiality-data-00
- TCP Connection Failure Notifications tools.ietf.org/html/draft-aravind-tcpm-lively-failure-notifications-00
- MPTCP sub-flows using Traceflow   tools.ietf.org/html/draft-aravind-mptcp-optimized-subflows-00

Opensource Contributions

Enhanced functionalities, added TCP and Namespace feature support, fixed functional issues in RADIUS Repos and added introduced informative dump-messages for EAP within RADIUS in Tcpdump repo.

- Radcli   github.com/radcli/radcli/commits?author=aravindprasad90 (10 contributions)
- Open vSwitch(OVS)   mail.openvswitch.org/pipermail/ovs-git/2019-April/023012.html
- FreeRADIUS Client   github.com/FreeRADIUS/freeradius-client/pull/64
- Tcpdump   https://github.com/the-tcpdump-group/tcpdump/pull/698
- Libradius   aravindprasad90.github.io/libradius-linux-TCP-Support/

Personal Projects

- **Code Review Tool for C and H files** aravindprasad90.github.io/Code-review-tool-for-.c-.h-/
  - Developed using Python for DELL Hackathon. Features include Git Support, Manual File Inputs and XML based Test support.
- **Web Apps**
  Stock-value-changes Notifications App
  - Deployed at   https://stock-notify-app.herokuapp.com/
  - With Flask and SQL   https://github.com/aravindprasad90/Stock-app-flask-sql
  - With Flask and Files-DB   https://github.com/aravindprasad90/Stock-Notify-App

  Weather App
  - Deployed at   https://aravindprasad.pythonanywhere.com/
  - With Django and MySQL   https://github.com/aravindprasad90/weather-webapp-django
  - With Flask and Files-DB   https://github.com/aravindprasad90/Flask-weather-app
  - With PHP and MySQL   https://github.com/aravindprasad90/weather-app-php-sql

Springer Journal Publications

- Cognitive QOS Maintenance in WLAN   link.springer.com/chapter/10.1007/978-3-642-22543-7_27
- Cryptographic scheme for Encryption/Decryption link.springer.com/chapter/10.1007%2F978-3-642-27308-7_5