Sumukha Tumkur Vani

371, 10th cross
Mahalakshmi Layout
Bangalore 560086
India
Phone: +91 80 2349 8309
Mobile: +91 95 91 636530
E-mail: sumukhatv@live.com

Education

2010 - 2014   **Bachelor of Engineering**

Major: Computer Science and Engineering
University Visvesvaraya College of Engineering, Bangalore University, India
Graduated with 83.8% [GPA: 3.67/4.0]

2008 - 2010   **Pre-University Course**

Physics, Chemistry and Mathematics
MES Pre-University College, Bangalore, India
2^{nd}PUC 93%

2005 - 2008   **High School**

VVS Sardar Patel High School, Bangalore, India
SSLC 95.36%

Professional Experience

2014 - Present   **Software Developer**, *Oracle India Pvt Ltd*, Bangalore, India
Oracle Virtual Networking

- Involved in the development of device drivers for Infiniband channel adapters
- Developed a Performance Analyser to profile the IO performance of IB HCAs
- Developed a Command Line Interface tool for Solaris to interact with IB HCAs

2013 - 2014   **Software Developer Intern**, *Streamoid Technologies*, Bangalore, India

- Worked on Natural Language Processing tools
- Designed and developed a search engine using Apache Solr
- Implemented and analysed product recommendation systems
- Built a performance and load testing system using Apache JMeter

2012 - 2013   **Software Developer Intern**, *Teritree Technologies*, Bangalore, India

- Developed a database web application on the Amazon EC2
- Developed an email application using the Amazon SES
- Built an extension for the Google Chrome web browser

Technical Skills

Programming	C, C++, Java, Python
Web	HTML, PHP, Javascript
Database	MySQL, MongoDB
Operating Systems	Solaris, Linux, Windows

Awards and Honors

Jan 2016	**Best Hack** - The Under25 Summit Hackathon.
Feb 2015	Winner of Cisco Hackathon 2015.
Nov 2014	**Excellent Paper Award** and **Gold Medal** for the research paper titled *"DSWSD: Double Sliding Window for Secure Data Transmission in WSNs"*, at the International Conference of Science, Technology, Engineering and Management, Singapore.
June 2014	**Best Under Graduate project** for *"Adaptive Load Balancing Protocol for Service Oriented Wireless Sensor Networks"*
Dec 2013	Winner of SAP Lumira University Challenge 2013.
Jan 2013	Held the **Collaboration Platform Lead** position in the Student Activities Committee for the year 2013-2014 in the IEEE Bangalore Section.

Projects

Computer Networks

Adaptive Load Balancing Protocol for Service Oriented Wireless Sensor Networks

- An efficient load balancing protocol for routing data in a WSN.
- Introduced a technique to deduce and evaluate a set of link disjoint paths from all available paths.
- Congestion detection and control by adaptive load distribution over multipath.

Computer Networks

SSexecutor, A multi-platform project testing tool

- A remote machine program execution system meant to facilitate code testing on multiple machines.
- Copies a project from local machine to a remote machine and executes it.
- Brings back the console output from the remote machine to the local machine.

System Software

SSASM, A Complete SIC Machine Assembler

- Implementation of a Simple Instruction Set machine compatible assembler.
- Includes a technique to detect errors in the source code.
- Produces an object file which is ready for loading.

Publications

Feb 2015   Lata B T, **Sumukha T V**, Suhas H, Tejaswi V, Shaila K, Venugopal K R, L M Patnaik "***SALB: Secure Adaptive Load Balancing in Service Oriented Wireless Sensor Networks***", IEEE Signal Processing, Informatics, Communication and Energy Systems Conference Proceedings

Nov 2014   Lata B T, **Sumukha T V**, Suhas H, Raghavendra M, Shaila K, Venugopal K R, L M Patnaik, "***DSWSD: Double Sliding Window for Secure Data Transmission in WSNs***", International Journal of Computer Networking, Wireless and Mobile Communications (IJCNWMC)

Nov 2014   Lata B T, Raghavendra M, **Sumukha T V**, Suhas H, Tejaswi V, Shaila K, Venugopal K R, L M Patnaik, " ***DRFSD: Directed Restricted Flooding for Secure Data-aggregation in Wireless Sensor Networks***", International Journal of Computer Networking, Wireless and Mobile Communications (IJCNWMC)