Manish Shambu

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EDUCATION

University of Colorado at Boulder

Boulder, CO

Master of Science in Computer Science; GPA: 3.79/4.0

Aug. 2017 - (expected) May. 2019

Email: manishshambu@gmail.com

 Coursework: Natural Language Processing, High Performance Scientific Computing, Distributed Systems, Internet of Things, Algorithmic Human Robot Interaction, Data Center Scale Computing, Advanced Algorithms.

PES University

Bengaluru, India

Bachelor of Engineering in Computer Science; GPA: 8.44/10.0

Aug. 2011 - July. 2015

• Coursework: Analysis and Design of Algorithms, Computer Networks, Operating Systems, Data Structures, Unix System Programming, Database systems.

Skill set

- Languages and Libraries: Python, C, Java, SQL, Java Script, scikit-learn, numpy, OpenMP, MPI, OpenCL
- Other Tools and Frameworks: Tableau, Git, Unix, Selenium, Raspberry Pi, AWS, Docker, Kubernetes, Apache Kafka, Hadoop, Spark, Storm, Cassandra, Flask, Jenkins

Current research

• Drone Assisted car parking: Simplifying car parking using drones. A drone captures a snapshot of the parking space, identifies empty spaces and guides a car to the empty parking spot.

Previous directed research

- Non Verbal expression for Robots (Advisor Prof. Brad Hayes) : Build a system to generate body language for robots
- Byzantine Chain Replication (Advisor Prof. Shivakant Mishra): Architectured and built a Byzantine Fault Tolerant system with 2f + 1 replicas.
- Intelligent Home Security (Advisor Prof. Tam Vu): Built a smart and intelligent home security system. Extensive usage of Raspberry PI to collect sensor data. Real time video monitoring and anomaly detection.

Professional Experience

Visa Inc United States

Software Developer Intern

May 2018 - August 2018

• Next-gen Tech Products: Enhanced and developed a gamification application that evaluates people based on few metrics and rank them on a leader board. Spearheaded and built an intelligent task assigning system(iTAS) using Drools rule engine in Java.

Oracle Bengaluru, India

Software Developer

Jun 2015 - Jul 2017

• Diameter Signaling Router: Development of DSR's FCAPS capability. Back end development to deploy DSR on OpenStack and PMAC. Scaled down the deploy time from 1 week(manual) to an hour(automated).

Selected Project Work

- Parallel FFT: Parallelized the FFT algorithm using OpenMP and MPI. Achieved multi fold improvements in speed.
- **Text classification**: Text classification of good and bad hotel reviews. Detecting deceptive reviews using neural networks.
- SpeeDroid: A crowd sourced android application to detect potholes and plot it on Google Maps.
- Malware Signature Analysis: Built a framework to detect various types of malware using static and behavioral signature detection.
- **HopIN**: Developed a carpooling software for the students at PES University. Designed and developed the driver rating and crediting system along with on the fly demand matching.

AWARDS & HONORS

- Best Innovative Idea award at Student Nokia Developer lab.
- Distinction award during all the semesters at PES University.
- Employee of the year award for delivering the code with quality on time.

LEADERSHIP AND OTHERS

- Student representative for CS department at PES Placement Cell.
- Graduate Teaching Assistant for Data Structures course. Prepare materials, exercises and conduct recitation for nearly 100 students. Create quizzes. Make sure that students understand the concepts clearly and help them debug problems during office hours.