Tulja Vamshi Kiran Buyakar

Masters Student Mobile: +91-9951471520

SKILL SET

 \bullet Languages: Java, C++, Python, SQL

• Technologies: Android SDK/NDK, OpenStack, Docker, Apache Kafka, MySQL, Zabbix

• Frameworks: Iotivity, Scikit-Learn, NLTK, Numpy

• Hardware Platforms: Raspberry Pi, Tizen

Major Projects

Virtual Firewall Implementation using Python

Jan 2017 – Apr 2017

Email: cs16mtech11020@iith.ac.in

Under Prof. Kotaro Kataoka

- Implemented packet filtering logic firewall using the rules.
- Benchmarked the firewall and created multiple instances of it handle the load efficiently.
- Implemented a mechanism to detect the port scan attack.

WiFi Ad-hoc network (IBSS) for Tizen framework

Aug. 2016 - Nov. 2016

Under Prof. Antony Franklin

- Developed an ad-hoc network for 3 or more Tizen nodes.
- The resultant setup can be used in wireless senro networks, vehicular ad-hoc networks, and many more places.

Automating Publication Management System

Jan 2017 – Apr 2017

Under Prof. Manohar Kaul

- Automated scripts to manage and update recent publication from each faculty's Google Scholar Profile.
- Web Crawling: Scripts to periodically crawl Google Scholar profiles and update new publications by a faculty.

Implementation of SLA based Microservices

Nov. 2017 - Present

Under Prof. Bheemarjuna Reddy Tamma

- Realized the concept of Network Slicing with Isolated Logical Networks on top of OpenStack virtualization platform.
- Orchestrated (with the help of Open Baton) the VNFs for ensuring the SLAs of the User Traffic and Scalability of Network Slices in 5G Networks.

Dynamic Adaption of Cool-Down Period for AutoScaling of VNFs

Nov. 2018

Under Prof. Bheemarjuna Reddy Tamma

• Reduced the number of Scale Ups by observing the variation in the load and adaptively changing the Cooldown period.

Publications

• MobiCom 2018: "Scalable Network Slicing Architecture for 5G", Accepted as Poster in ACM MobiCom 2018.

CERTIFICATIONS

- Beginning Game Programming with C#: Successfully completed the online course offering by University of Colorado System on Coursera. *GPA* : 7.8.
- Programming Mobile Applications for Android Handheld Systems: Successfully completed the online course offering by University of Maryland College Park on Coursera. *GPA* : 6.9.
- ullet Computer Networks: Successfully completed the online course offering by University of Washington on Coursera. GPA: 7.15.

EDUCATION

Indian Institute of Technology Hyderabad

Master of Technology in Computer Science; GPA: 8.54/10

Advisor: Prof. Bheemarjuna Reddy Tamma

Sreenidhi Institute of Science and Technology

Bachelor of Technology in Computer Science and Engineering; Percentage: 80%

Nano Junior College

Intermediate; Percentage: 88.5%

Sri Sai Grammar High School

School Secondary Certificate; Percentage: 87.5%

Kandi, Telangana, India Aug. 2016 - Present

Ghatkesar, Telangana, India

Aug. 2012 - June. 2016

Hyderabad, Telangana, India Aug. 2010 - May. 2012

Hyderabad, Telangana, India

May 2010

Extra Co-curriculars

• Volunteered for National Communication Conference (NCC) held in February 2018 at IIT Hyderabad. Implemented QR Code based validation mechanism for participants.

• Attended Information and Communications Technology for Development(ICT4D) Conference held in Held at Hyderabad, India in May 2017.

Hobby Projects

QoE Visualizer: Made a Quality of Experience Visualizer Chrome Extension for visualizing the network data. Some of my projects are hosted at https://github.com/tulia

Interests and Hobbies

- Watching TED talks and Movies, Reading Books (Non-Fiction)
- Calligraphy, Listening to Podcasts, Online Courses

LANGUAGES

• Telugu, Hindi, English