M S Akhil Teja (Authorised to work)

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Education

University of Colorado Boulder Boulder, USA
Master of Science - Computer Science GPA: 4.0 Aug 2021 - May 2023
Courses: Distributed Systems*, Big Data Architecture* , Data Centre Scale Computing, Machine Learning

Indian Institute of Technology Guwahati, India
Bachelor of Technology - Computer Science and Engineering June 2013 - May 2017
Courses: Computer Networks, Software Engineering, Operating Systems, Intelligent Systems and Interfaces

Experience

Electronics for Imaging, Pvt Ltd - Senior/Software Engineer May 2020 - July 2021
Software Used: C# .NET, C++, Mopria Certification, Agile Sprint

- Enhanced EFI product installation tool by implementing cloud, network and multi-USB installation methods.
- Achieved Mopria certification by introducing cloud, NFC tap-to-print, and wireless printing capabilities for EFI print ecosystem, thereby enabling unparalleled interoperability between brands, in a team of eight.
- Bestowed with Employee of the Quarter (Apr-Jun 2021) for consistent top performance in Fiery IDC team.

Samsung Research Institute (SRI) - Senior/Software Engineer June 2017 - May 2020
Software Used: C/C++, Kubernetes, RedisDb, Docker, 3GPP Open-API specifications, Nghttp2, Micro-Services

- Created a utility package that semantically validated cloud-native 5G CNF[1] inter-service communication messages against 5G specifications which performed faster than LibYAML and Swagger.
- Coded a discrete event network simulator to test the behavior and performance of cloud-native 5G CNF[2].
- Spearheaded development of platform-agnostic, stateless, CaaS[3] deployable microservices based cloud-native 5G Core Network.
- Designed a novel semi-supervised learning algorithm that optimized paging signaling overhead by generating a dynamic Tracking Area List configuration in 4G LTE after thorough research of current academic literature.
- Awarded Samsung S.P.O.T for developing a Memory Leak framework which solved a critical service outage issue.
- Granted Samsung E.V.P award for contributions in Stabilizing and Commercializing the LTE-vGW for Jio across 140,000 sites pan India.

Samsung Research Institute(SRI) - Software Development Intern May 2016 - July 2016
Software Used: Python, numpy, Scipy, Random Forest, Linear Regression, Logistic Regression

- Envisioned and built a desktop version of an intelligent dialer application based on call log data, contacts, messages, and calendar information by developing a novel learning algorithm.
- Recognized as Samsung Best Intern (Summer 2016) for innovative contributions to the Samsung Gallery team.

Relevant Projects

Personalized Activity Recommender System [GitHub] Fall 2021
Dr. Dirk Grunwald, Professor University of Colorado, Boulder

- Launched an interactive, auto-complete enabled web interface that suggested a list of exciting activities that give user an enjoyable experience for a particular location and time using dynamic google maps UI and GeoCode API.
- Created a resilient and sustainable end-to-end system using JavaScript, REST APIs, Messaging Queues, Kubernetes, Docker and Python in a team of two.
- Implemented using Docker, RabbitMQ, Google Maps API, PostgreSQL, Flask, Postman, JavaScript, Redis Db.

Evaluation of QOE metrics for DASH using Trace Driven Emulation Test Bed [GitHub] Spring 2017
Undergraduate Thesis: Dr. T Venkatesh, Associate Professor I.I.T Guwahati

- Formulated and developed a QoE Monitoring and Measurement system for DASH using a real-time trace-driven emulation testbed and a real-time QoE metrics capturing technique in Javascript and Python.
- Created a scalable, reliable, and hardware-agnostic emulation testbed by employing Linux TC program that replicated a wide range of network conditions from real-time bandwidth traces dataset.
- Evaluated noteworthy objective QoE metrics for Buffer Based, OSMF, and Segment Aware Rate Adaptation (SARA) algorithms utilizing the developed testbed.
- Analyzed the QoE metrics for a shared bottleneck scenario with three clients each running a different algorithm.

Skills

- C++, C#, C, Python, Java, Django, SQLite, Hadoop, PySpark, Arduino, Keras, Google Cloud Platform, Selenium, webRTC, NodeJS, Android, Linux, NS3, 3GPP, 5G (NR), 4G (LTE), Raspberry Pi, REST APIs, Web Sockets.

[1] Core Network Functions
[2] Access and Mobility Management Function and Session Management Function
[3] Container as a Service