

Sai Akhil Teja

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EDUCATION

University of Colorado, Boulder

Master of Science - Computer Science

Courses: Data Centre Scale Computing, Machine Learning

Boulder, USA

Aug 2021 - May 2023

Indian Institute of Technology

Bachelor of Technology - Computer Science and Engineering

Courses: Artificial Intelligence, Information Retrieval*, Intelligent Systems and Interfaces**

Guwahati, India

June 2013 - May 2017

EXPERIENCE

Electronics for Imaging, Pvt Ltd - Senior Software Engineer

May 2020 - July 2021

Tools Used: C#, .NET, C++, Mopria Certification

- Enhanced EFI product installation tool by implementing Cloud, Network and multi-USB installation methods
- Achieved Mopria Certification by implementing Cloud, NFC tap-to-print, and wireless printing capabilities for EFI Print Ecosystem, thereby enabling unparalleled interoperability between brands.
- Awarded Employee of the quarter for contributions to the Fiery Networking team.

Samsung Research Institute (SRI) - Senior/Software Engineer

June 2017 - May 2020

Tools Used: C/C++, Kubernetes, RedisDb, Docker, 3GPP OpenAPI specifications, nghttp2

- Developed a POC model for 5G Mobile Edge Computing Network. Worked on the Samsung EES node.
- Semantically validated the cloud-native 5G CNF¹ inter-service communication messages against 3GPP 5G OpenAPI specifications by developing a utility package, that performed better than LibYAML and Swagger.
- Tested the behavior and performance of the cloud-native 5G CNF² by programming a discrete event network simulator.
- Contributed to the development of platform-agnostic, stateless, CaaS³ deployable cloud-native 5G Core Network.
- Programmed numerous features and analyzed and fixed multiple bugs in virtualized SAEGW⁴.
- Designed a novel semi-supervised learning algorithm that optimizes paging signaling overhead using a dynamic Tracking Area List configuration in 4G LTE.
- Awarded Samsung SPOT award for Memory Leak framework and Samsung EVP award for contributions to the Virtualized LTE SAEGW Jio Deployment.

Samsung Research Institute(SRI) - Software Development Intern

May 2016 - July 2016

Tools Used: Python, numpy, Scipy, Random Forest

- Implemented a desktop version of an intelligent dialer application based on call log data, contacts, messages, and calendar information by developing a novel learning algorithm.

RELEVANT PROJECTS

Evaluation of QOE metrics for DASH using Trace Driven Emulation Test Bed [GitHub]

Spring 2017

Undergraduate Thesis: Dr. T Venkatesh, Associate Professor

IIT 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 using Javascript and Python.
- Created a scalable, reliable, and hardware-agnostic emulation testbed using Linux TC that can replicate a wide range of network conditions using real-time bandwidth traces.
- Evaluated noteworthy objective QoE metrics for Buffer Based, OSMF, and Segment Aware Rate Adaptation (SARA) algorithms using the testbed.
- Analyzed the QoE metrics for a shared bottleneck scenario with three clients each running a different algorithm.

IITG Hospital Management System [GitHub]

Spring 2015

Dr. Pradip K Das, Professor

IIT Guwahati

- Developed an interactive web interface for IITG Hospital Management system by implementing all the requirements of a general hospital using SDLC Waterfall Model and Django, SQLite, and Ajax.
- Provided easy and effective storage of patient information and their test reports.
- Supported an autocomplete enabled querying based on patient name or medicine details or test reports.

SKILLS

- **Software:** C++, C#, C, Python, Java, Django, SQLite, Ajax

¹Core Network Functions

²AMF and SMF

³container as a service

⁴3GPP defined LTE Network node)