Sai Ram Varma Budharaju

Gainesville,FL

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Personal Profile

An enthusiastic and driven upcoming new graduate with a solid foundation in computer science with hands-on professional experience in scalable systems. Seeking to leverage my expertise in system engineering, and software development.

Education

University of Florida *Gainesville, Florida*

Masters in Science, Computer Science *August 2022 - Current*

- **Courses:** Distributed operating systems, Analysis of Algorithms, Advance Data Structures, Computer Networks, Human Computer Interaction(UI Development), Cyber-Physical System Security, Computer Network Security.

Gandhi Institute of Technology and Management *Visakhapatnam, India*

Bachelors in Technology in Computer Science Engineering. *June 2016 - May 2020*

Work Experience

Tata Consultancy Services with Nokia Networks as Client *Chennai, India*

Assistant Systems Engineer *Oct 2020 - April 2022*

- Spearheaded the design,development and implementation of Network Management Systems (NMS) Adaptors supporting Nokia NetAct service Fault management and Performance management for network elements in Wi-Fi, IP management and Telco clouds.
- Innovated a transformative automation strategy for regression testing of fault management and performance management which reduced the efforts by 70%. Additionally, imparted training to team members to ensure seamless continuation of automated testing.
- Engineered and rolled out customized converters to to decode and interpret complex network metrics as per specific client mandates.
- Proactively engaged with and provided mission-critical on-call technical support like project Debugging and logging to industry giants like T-Mobile ensuring optimal network uptime, fortified client trust, and accentuated commitment to service excellence.

Cassini Systems *Hyderabad, India*

Software Developer Intern *May 2019 - July 2019*

- Designed and developed a cutting-edge prototype for a facial recognition system capable of identifying persons of interest from live security camera feeds, enabling real-time threat analysis.
- The project was primarily developed in Python, integrating OpenCV for image processing and TensorFlow for machine learning tasks. Utilized Numpy for efficient data handling and computational operations, ensuring swift processing even with large datasets.
- Achieved a commendable accuracy rate of 83%, highlighting the efficacy and potential of the prototype in real-world scenarios.

Projects

Care Companion *Gainesville,FL*

University of Florida *Oct 2023 - Nov 2023*

- Developed CareCompanion, an iOS application designed to enhance patient-doctor communication post-consultation, ensuring effective healthcare management and improved patient outcomes.
- Utilized a diverse range of technologies including React (front-end), Node.js (back-end), MongoDB (database), Express.js (web application framework), JWT for secure authentication, and Axios for HTTP requests.
- Ensured the security of patient data through the implementation of role-based access control and compliance with healthcare standards.

Twitter Simulator - Client-Server *Gainesville,FL*

University of Florida *Nov2022 - Dec 2022*

- Developed a scalable and secured Twitter-like platform with a client-server model,leveraging web sockets to support real-time features such as hashtags, mentions, retweets, and follows concurrent usage by a large number of users.
- - Designed and implemented a simulator using Zipf distribution that can generate users randomly and interact among users testing features to simulate realistic usage.

Chord Protocol - Peer to Peer *Gainesville,FL*

University of Florida *Oct 2022 - Dec 2022*

- Developed and scaled a remodeled Chord Protocol for object access services using Erlang actor model to create parallelism and fault tolerance to determine the Average Hops required in a Chord ring of large number of nodes and requests.
- System demonstrated95% success rate handling node failures when tested with 5000 nodes and100 requests traversing in minimal number of hops.

Skills

Frameworks JavaScript (ES6+), React, Node.js, Express.js,Python,Socket Programming,HTML/CSS, MySQL.

Platforms Platforms: Xcode, Android Studio, Heroku (Deployment), Eclipse.

Tools Git, Jenkins, JWT, Axios, RESTful API Design,Linux, Shell (Bash/Zsh), Node.js, Wireshark.