GIRIDHARA GANESH TALLA

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SUMMARY

Computer Science graduate with over two years of experience in software development, specializing in designing and developing user-centric, high-performance applications. Demonstrates a solid commitment to delivering quality solutions, prioritizing user experience, and adhering to rigorous standards. Skilled in deploying innovative and efficient approaches to software challenges.

EDUCATION

University at Buffalo, The State University of New York **December 2023**
Masters in Computer Science and Engineering **GPA: 3.78**
Course work: DMQL, Computer Security, Data Intensive Computing, NLP and Text mining, Analysis of Algorithms

Indian Institute of Information Technology Guwahati **July 2020**
Bachelor of Technology Computer Science Engineering **GPA:3.8**

TECHNICAL SKILLS

Programming Languages : Java, Python, C, C++, Go, PHP, Apex, Ruby, Bash.
Web Technologies : React, JavaScript, Bootstrap, HTML, CSS, Node, Angular, Web3, Solidity.
Databases and Cloud : Apache Ignite, MYSQL, AWS(EC2, RDS, S3, Cloudwatch), MongoDB, Redis, GCP, Azure.
Frameworks : Spring Boot, Django, Flask, Play Framework, Ruby on Rails, Apache AirFlow.
Other : Git, Apache Spark, Apache Kafka, Akka, ElasticSearch, RESTful API.

EXPERIENCE

Software Engineer **Jio Platforms Limited, Bangalore** **August 2020 - July 2022**

- Engineered cutting-edge Offers Engine architecture leveraging **AKKA(Java)**, **Apache Kafka**, **Apache Ignite**, and **Apache Spark**. Achieved an impressive 50% reduction in coupon assignment time
- Developed an advanced SMS delivery system, achieving a 99% success rate in message delivery to users. Implemented TIBCO queue, **Cassandra**, and **Apache NIFI**, reducing average message delivery time to 10 milliseconds.
- Revamped applications by developing a Jio-developed **Pigeon framework(Java)** to empower Business Managers to initiate campaigns in SIT and Pre-Prod, improving deployment time by 3+ days
- Led a high-performing team of 3 engineers in seamless migration of a comprehensive campaign framework comprising 40+ jobs from **Azure** to **Jio cloud**, facilitating enhanced performance and efficiency for Jio Payments Bank
- Architected and implemented an **Apache Airflow (Python)** data ingestion pipeline, processing over 10TB data daily, reducing processing times by 35%.
- Optimized **SQL** queries for fetching transaction logs, boosting Offers Engine efficiency and slashing insight generation time to under 200 milliseconds for each offer campaign.

Software Developer Intern **TheRightDoctors, Hyderabad** **May 2019 - August 2019**

- Collaborated with the development team on TheRightDoctors platform's chatbot project, implementing NLP (Python) and sentiment analysis to enhance user interactions, resulting in a 40% increase in user engagement among existing clients.
- Supervised and executed Salesforce and Google Contact merging and syncing with **API-based** custom merge logic using Apex Programming Language, increasing the accuracy and efficiency of the contact management process by 20%.
- Implemented cutting-edge Single Sign-On (SSO) across 4 intern-driven web applications, seamlessly integrating **MEAN stack**, **JWT**, and **Redis Cache**, reducing the login time for users by 50%.
- Led a 2-member team in developing a video commenting application using the MERN stack, tailored for medical conferences videos. This application enhanced editor engagement by enabling real-time discussions and feedback on conference videos.

PROJECTS

Advanced Predictive Modeling for Used Car Price Estimation, UB **August 2023 - September 2023**

- Spearheaded the development of a robust machine learning model for predicting used car prices, leveraging **Python**, TensorFlow, and a dataset of 1 lakh+ used car listings
- Currently leading the design and development of a user-friendly web application using **Flask**, HTML, and CSS, simplifying data input and enhancing the end-user experience

Enhanced COVID-19 Detection from Chest X-Rays , UB **August 2023 - September 2023**

- Enhanced COVID-19 detection accuracy by developing a machine learning model using a large dataset of chest X-rays, achieving a 97% training accuracy and a 95% validation accuracy.
- Employed advanced image segmentation techniques, boosting the efficiency of the models in analyzing complex medical imaging data.

Advanced Online Auction Platform, UB **July 2023 - September 2023**

- Led the development of Auction Point, an online auction platform similar to eBay, implementing secure user authentication and role-based access control, significantly enhancing platform security and user trust.
- Engineered a personalized recommendation system using Matrix Factorization and developed the site with a JavaScript stack (Express, Node.js, React, MySQL), achieving a user-friendly interface and efficient back-end processing.

LibraryHub: Building a Bookworm Community **January 2023 - May 2023**

- Orchestrated creation and deployment of a dynamic library hub website, harnessing Java (Spring Boot) and PostgreSQL for efficient data management and superior performance on local internal Linux servers.
- Enhanced book recommendation precision by 10% through the integration of a machine learning algorithm, leveraging user reading history and preferences.

Celestial Gems: Game item and character NFT's, UB **January 2023 - May 2023**

- Developed and deployed a scalable and secure cryptocurrency platform for rapid character and item exchange, ownership, and rentals using **JavaScript** and Solidity on **GCP** and Infura, revolutionizing the gaming industry
- Spearheaded the creation of a novel NFT marketplace for game items and characters that dynamically adjusts the price of characters based on demand, enabling gamers to seamlessly buy, sell, and rent these digital assets in a fair and efficient manner

Text Chat Application, UB **January 2023 - May 2023**

- Engineered a robust text chat application using C and Socket Programming, featuring a scalable architecture with a dynamic server and multiple secure client connections, capable of handling up to 10,000 concurrent users with less than 100ms latency
- Implemented a novel messaging protocol that reduces bandwidth usage by 20% and improves message delivery reliability by 99% compared to traditional messaging protocols.

Authorship Attribution for Neural Text Generation, UB **January 2023 - April 2023**

- Directed the creation of a cutting-edge authorship attribution model, leveraging advanced NLP techniques including BERT and GPT-3, and integrating attention mechanisms for enhanced text analysis. Achieved state-of-the-art accuracy in identifying authors from 8 Large Language Models.
- Implemented and fine-tuned attention-based neural networks, significantly improving the model's ability to discern subtle linguistic patterns unique to each author.

Inventory Control Management, UB **September 2022 - December 2022**

- Led a team of three in developing and deploying extensive inventory management **Rest API**. Leveraged **Java(Spring Boot)** and **PostgreSQL** to deliver a secure and efficient solution hosted seamlessly on internal Linux servers

RESEARCH EXPERIENCE

Research Assistant **IIIT Guwahati** **August 2019 - May 2020**

- Collaborated with esteemed researchers to conceive and implement a sophisticated attention mechanism for remote sensing data, boosting classification accuracy by an impressive 7% and slashing model training time by 30%.
- Explored and applied domain adaptation techniques to enhance the model's performance on a remote sensing domain with limited annotated data belonging to a particular region, demonstrating the ability to transfer knowledge from images collected in other regions.

PUBLICATIONS AND CERTIFICATIONS

- **"A deep learning-based technique for firm annotation and domain adaptation in land cover classification using time-series aerial images"** Indrajit Kalita, Ganesh Talla, Shounak Chakraborty, Moumita Roy, published in **Earth Science Informatics Springer Nature 2023** on 08 December 2023. Paper Link
- Natural Language Processing with Classification and Vector Spaces.
- RESTful API with HTTP and JavaScript.