Santosh Chaluvaraju

Machine Learning Engineer | Ex-Machine Learning Engineer Intern at Object Computing

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PROFESSIONAL EXPERIENCE

OBJECT COMPUTING | St. Louis, USA | *Machine Learning Engineer Intern* | Jun 2023 - Aug 2023
- Leveraged Google Cloud Platform to segment images at scale using Segment Anything Model (SAM) from META.
- Developed Custom prediction routines and containers to deploy SAM to an endpoint for Online Predictions using VertexAI.
- Built Batch Prediction pipelines using Kubeflow to segment images in batches and tested against batch size of up to 1000 images.
- Finally documented and Open Sourced the work in Github repo and also gave a presentation on the usage and impact.

WERIZE (Financial Tech) | Bangalore, INDIA | *Software Engineer* | Feb 2021 - Dec 2021
- Built a Bot model to emulate Credit teams manual underwriting process, resulting in a 60% improvement in operational efficiency and also reduced the incremental manpower requirement.
- Integrated Google Authentication on frontend and added API filters in the backend controller layer to grant access to users only within the organization.
- Automated daily EMI collections processing using backend cron-jobs and AWS Simple Queue Service (SQS).

HIGH PEAK SOFTWARE | Bangalore, INDIA | *Software Engineer* | Aug 2018 - Feb 2021
- Designed and developed server side RESTful web services and also involved in database design for the ADP project.
- Created common libraries to mitigate code duplicity and to promote reusable components across the project for the team.
- Took self initiatives to resolve blockers and to develop ownership consciousness throughout the development.

WINIX TECHNOLOGIES | Bangalore, INDIA | *Software Engineer* | Jun 2017 - Aug 2018
- WIP, A comprehensive Mesh Network Technology. Worked on pairing, discovery, and network association parts of WIP.
- Integrated Luci web interface with WIP and implemented device management and firmware upgrade of devices.
- Actively involved in Bug Fixing and end to end testing of the platform before every release.

EDUCATION

Masters Of Science in Data Science | Jan 2022 - Dec 2021 | Illinois Institute of Technology (GPA: 3.7)

RELEVANT COURSEWORK

Applied Statistics, Machine Learning, Deep Learning, Big Data Technologies, Data Structures and Algorithms

SKILLS

Languages - Python, R, Javascript, Java, C++, C, HTML
Databases - SQL, MongoDB, DynamoDB
ML Algorithms - SVM, Regression, Random Forest, XGBoost, PCA, Decision Trees, Neural Nets
MLOps - Kubeflow, Airflow, Docker, AWS(Amazon Web Services), GCP(Google Cloud Platform)
Frameworks & Libraries - Spark, Hadoop, Kafka, Pytorch, TensorFlow, Spring, FAST API
Project Management & Version control - Jira, Asana, Confluence, Git, DVC

PROJECTS

META SAM Model workflow in Google Cloud Platform - Link   **Aug 2023**
Deploy SAM on GCP using VertexAI for Online Predictions. Built Batch Prediction Pipeline using Kubeflow.

Chat Bot, Based on End to End Memory Networks - Link   **Mar 2023**
Question Answer model trained on Facebook Babi Dataset, Based on the Paper End to End Memory Networks.

Missing value Treatment using Clustering Technique - Link   **Feb 2023**
Analysis of Row Based vs Column Based Ignore Methods.

Scalable End to End Machine Learning Data Pipeline with Kafka Streaming in AWS - Link   **Nov 2022**
Multi-threaded python application capable of handling end to end ML Workflow from data engineering to predictions.

Stock Market Gap Phenomenon Analysis - Link   **Jul 2022**
Stock Market Gap Phenomenon analysis using Statistical Techniques.

NOTABLE ACHIEVEMENTS

Credit for participating and qualifying for the final rounds of **RoboTryst-2015, A National Level Robotics Championship organized by Robosapiens Technologies Pvt. Ltd. In association with Tryst-2015 at Indian Institute Of Technology - Delhi.**