Santosh Chaluvaraju

Machine Learning Engineer | Ex-Machine Learning Engineer Intern at Object Computing Chicago, IL, 60616 | Ph: +1 312 478 2361 | email: schaluvaraju@hawk.iit.edu | Portfolio | LinkedIn

Ingenious AI Engineer with robust leadership skills and in-depth AI system comprehension. Proficient in crafting scalable end-to-end AI pipelines, from pure research to minimum viable products to scalable production ready deployments.

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 2023 | Illinois Institute of Technology (GPA: 3.7/4.0)

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

PROJECTS	
META SAM Model workflow in Google Cloud Platform	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	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	Feb 2023

Analysis of Row Based vs Column Based Ignore Methods.

Scalable End to End Machine Learning Data Pipeline with Kafka Streaming in AWS

Nov 2022

Jul 2022

Multi-threaded python application capable of handling end to end ML Workflow from data engineering to predictions.

Stock Market Gap Phenomenon Analysis

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.