Sasanth Thota

Willing to Relocate | Stony Brook, NY | [Portfolio](#) | [thotasasanth@gmail.com](#) | +1 (934)221-8551 | [LinkedIn](#) | [GitHub](#)

EDUCATION

Stony Brook University (State University of New York) Stony Brook, NY
*Master of Science (M.S.) in Computer Science | **CGPA**: 3.89 /4.0* Aug 2022 - Dec 2023
Positions: Graduate **Teaching Assistant** (CS Principles), Division of IT **Telecom Engineer**
Coursework: Visualization & Visual Analytics, Database Systems, AI, Computer Vision, Data Science, Computer Networks

Indian Institute of Technology (IIT) Bhilai Raipur, IND
*Bachelor of Technology (B.Tech.) in Computer Science | **CGPA**: 3.71 /4.0* July 2017 - May 2021

SKILLS

Languages: Python, Java, C++, C, JavaScript, HTML, CSS
Tools: Git, Bitbucket, Jira, Confluence, Shell Scripting, Bash, KornShell, Maven, HPE NonStop, Docker, MERN Stack, Tableau
Databases: SQL, MySQL, IBM DB2, DBeaver, MongoDB, XML, PySpark, MapReduce, Postgres, JDBC
Cloud Platforms: Amazon AWS (S3, EC2, RDS, DynamoDB, Lambda, SageMaker), Microsoft Azure, Google Vertex AI
Libraries / Frameworks: D3JS, ReactJS, NodeJS, Flask, Django, MLflow, Apache Airflow, Hadoop, Keras, Tensorflow
General: ML, AI, Data Science, Full Stack Web Development, RESTful APIs, Data & ML Pipelines

EXPERIENCE

Amtrak Philadelphia, PA
Software Engineer Intern May 2023 - Present
- Dev of Logger App using **Java** Swing, SOAP, **Maven**, **JDBC**, **MySQL**; handling **18M+ monthly logs** across **6** US regions.
- Automating the data transfer mechanism from HP NonStop production servers to specific locations, using **Cron** job & SFTP.
- Implementing a seamless Single Sign-On (**SSO**) authentication with Active Directory, optimizing user experience & security.
- Resolving **Jira** SPRs for production bugs and creating detailed software documentation on **Confluence**.

Tata Consultancy Services (TCS) Research & Innovation Bangalore, IND
Software Engineer (MLOps), AI Performance Management September 2021 - July 2022
- Developed an internal framework '**Opsense**', following **Agile** & reduced end-to-end ML model Dev cycle's time by **45%**.
- Implemented **10+** ML workflow components as **docker** containers – Data Profiling, Transformation, Bias/ Fairness, **Metrics** generation, Explainability, Robustness / Security, Deployment using **Apache Airflow** & Kubeflow pipelines.
- Automated generation of monthly evaluation reports with charts/ metrics of data and deployed model, for easy client insights.
- Developed **SageMaker** data engineering jobs using **AWS** S3, CloudWatch, EventBridge to build quick & cost-effective sols.

Urban IQ Bangalore, IND
Software Engineer Intern, DOOH Advertising May 2020 - July 2020
- Designed, Tested & Integrated a generic geocoding model developed using Google Maps API & NLP techniques, into the company's **DSP + Location Intelligence Platform**; achieved **92%** accuracy in resolving geospatial user addresses.
- Platform uses visualization dashboard & generates best real-world locations for client Ad campaigns based on demographics.
- Implemented backend data engineering & analysis procedures, **RESTful APIs** for platform solution to improve functionality.
- Received a **LOR** (Letter of Recommendation) from **CTO** acknowledging exemplary work performance & sincerity.

Efftronics Systems Vijayawada, IND
ML Intern June 2019 - July 2019
- Led a team of **4** on the project '**Smart Elevators**' using Transfer Learning based Facial Recognition System.
- Trained a DL model and maintained a **DB2** database for **CRUD** operations on **5000** employees' data using advanced **SQL**.

PROJECTS

Road Accidents Interactive Dashboard   *(**Ranked #1** on the [**Stars Playlist**](#) ; project under prof. Klaus Mueller, SBU)*
- Built a custom-designed interactive visual analytics dashboard to analyze key factors in road accidents across **3000** U.S. counties from scratch using **D3JS**, **ReactJS**, and **Flask**.

Expense Tracker Application
- Built & deployed a **Full Stack MobileApp** using **React** and **Heroku** for Android/ iOS to track personal incomes/ expenses.
- Stored the transactions data in **MongoDB** and generated reports & insightful graphs for monthly and yearly timelines.
- Automated the process of adding transactions using alert emails & Gmail API, thereby minimizing manual efforts for users.

Hand Gesture Recognition System   *(under prof. Sk Subidh Ali, IIT Bhilai)*
- Developed a customizable **real-time** prediction system that converts gestures to text/speech using gTTS, TF, Keras, OpenCV.
- Deployed the **CNN** model as a **Web Application** on Heroku using **Django** and achieved **85%** accuracy on production data.

AI-powered Pac-Man Solver
- Implemented a Pac-Man game solver in **python** using **AI path-finding algorithms** (A*, UCS, DFS) and Bayesian Networks.

TRAINING & CERTIFICATIONS

IBM Python for Data Science, AI & Development ; **Amazon AWS** Cloud Practitioner Badge