

Sai Adarsh Kasula

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SUMMARY

Adaptable Data Scientist with expertise in deploying advanced deep learning models for medical image analysis and automating clinical workflows. Demonstrated ability in creating a mortality prediction model that leverages survival analysis and crafting interactive BI dashboards to enhance analytical decision-making. Aspires to apply skills in data-driven insights and model optimization to contribute to innovative solutions and impactful results in the target position.

SKILLS

- **Programming Languages:** C/C++, Java, Python, SQL, R, HTML, C#
- **Data Science Tools:** OpenCV, PyTorch, TensorFlow, seaborn, Numpy, Pandas, Pillow
- **Web/Database:** MySQL, PostgreSQL, Django, Flask
- **Cloud Computing:** Microsoft Azure, GCP, AWS, Virtual Machines (VMs), Compute Engine, Cloud Storage, EC2, S3
- **Additional Skills:** Docker, GitLab CI/CD, Git, Bitbucket, MLOps, EPIC, IntelliSpace CV, OOPS

EDUCATION

Rutgers State University
MSc, Data Science

Aug 2023 - May 2025
New Brunswick, New Jersey

Gitam University
B.Tech, Computer Science

Jun 2017 - Aug 2021
Hyderabad, India

EXPERIENCE

Robert Wood Johnson Hospital
Data Scientist

Dec 2024 - Present
New Brunswick, New Jersey

- Stenosis detection via Deep Coro – Implemented a Deep Coro-based deep learning pipeline to identify coronary stenosis in echocardiogram sequences, automating lesion detection and integrating outputs into clinical ML workflows.
- Automated contrast classification – Built a CNN-based classifier to distinguish contrast vs. non-contrast cardiac images, automating study tagging and achieving 73% accuracy.
- Mortality Prediction Model – Built a supervised machine learning model to predict patient mortality rates using survival analysis techniques, leveraging recent ECG and echocardiogram data to assess patient outcomes and clinical risk stratification.
- Used the Data Refiner tool for unsupervised learning to create clusters using UMAP and PCA for dimensionality reduction on blood and biochemical biomarkers, identifying patients with possible myocardial injury leading to deaths and validating results through statistical testing (ANOVA, Kruskal–Wallis, Chi-square) to establish clinical risk groups, improving patient stratification accuracy

Rutgers School of Social Work
Faculty Research Assistant

May 2024 - Aug 2024
New Brunswick, New Jersey

- Architected 5+ interactive BI dashboards integrating Python/SQL data pipelines, which served research team members with real-time social work program analytics and KPI tracking, enhancing data-driven decision-making
- Created and led training on Power BI dashboards and Python libraries for visualizing research data, resulting in enhanced team competency and accelerated report generation.

LTIMindtree Pvt Ltd
Business Analyst

Jun 2021 - Aug 2023
Mumbai, Maharashtra

- Conducted regular story mapping sessions with stakeholders to decompose complex requirements into manageable user stories and establish a clear product roadmap, utilizing JIRA for story creation, backlog management, and sprint planning.
- Developed comprehensive documentation, including BRDs (Business Requirements Documents) and BPDs (Business Process Documents) for H2R workflows and implemented real-time data visualization using Power BI & Tableau.
- Led multiple Agile projects using Scrum and Kanban frameworks focused on O2C reporting automation and H2R dashboards, also utilizing SQL, ETL processes, and Spark for data modeling.

SELECTED PROJECTS

[Text Completion Model](#) | Natural Language Processing Project – (RU)

Oct 2024 - Dec 2024

- Engineered a text completion model from the ground up based on transformer architecture from the "Attention is All You Need" paper, the foundation of LLMs like GPT-3 and BERT, utilizing NumPy, Pandas, SQL, and command line automation for data preprocessing and optimization.

[Twitter-Search-Application](#) | Database Project using Machine Learning Algorithms – (RU)

Jan 2024 - May 2024

- Developed a Twitter Search Application enabling user segmentation and hashtag searches with trending features, achieving 0.02 sentiment score through statistical analysis, handling 134k tweets and 90k users across MySQL and Snowflake data warehouse with SQL queries, BigQuery, ETL processes using Python, Pandas, NumPy, implementing Flask UI and automation tools for end-to-end solution and process improvement that enhanced performance by 40%.

[Flight Prices Prediction using Amazon SageMaker](#) | Machine Learning Project – (RU)

Jan 2025 – May 2025

- Developed an end-to-end ML pipeline for flight price prediction using XGBoost regression and time series analyses, achieving 87% R² accuracy with RMSE of \$42.5 through hypothesis testing and statistical analysis, implementing feature engineering with Python, Flask API integration, and leveraging Amazon SageMaker for model training, tuning, and deployment while conducting A/B testing to optimize model performance and validate predictions.

CERTIFICATIONS

- AWS Associate Data Engineering Certificate

Dec 2024 – Dec 2027