ANOUSHKA MERGOJU

Syracuse, New York 13210

EDUCATION

Master of Science in Computer & Information Science

Syracuse University

Bachelor of Technology in Computer Science & Engineering

GITAM University

Aug 2022 – May 2024

Syracuse, New York

July 2018 – July 2022

Hyderabad, India

TECHNICAL SKILLS

Programming Languages: Python, R, C, C++, Java, SQL, Haskell, UNIX, HTML, CSS, JavaScript, MATLAB, XML Web Frameworks: PyTorch, Node, React, Flask, Angular, Spring Boot, OpenCV, Django, PySpark, Maven, Gradle, JUnit Software Tools: Tableau, Power BI, Airflow, Kafka, NiFi, Databricks, MS Excel, Virtual Box, Docker, Kubernetes, GIT IDEs & Notebooks: Jupyter, Visual Studio, PyCharm, Colab, Weka, IntelliJ, Eclipse, Netbeans, Kaggle, Sublime Text Database Management: MS-SQL Server, MongoDB, MySQL, PostgreSQL, Oracle DB, MS Access

Cloud, OS & APIs: AWS, Windows, GPT, REST, SOAP, Postman, Linux, Ubuntu

Methodologies: Agile, Scrum, EDA, ETL, Time Series Forecasting, NLP, Microservices, Statistical Modeling, Data Management (Processing, Storing, Modeling, Quality, Security), Pipelines, CI/CD, Security Practices, Predictive Analytics

WORK EXPERIENCE

Operations Research Analyst

 $\mathbf{May}\ \mathbf{2023} - \mathbf{Dec}\ \mathbf{2023}$

 $Syracuse\ University\ -\ College\ of\ Engineering\ \ \ Computer\ Science$

 $Syracuse,\ New\ York$

- Tech Stack: Jupyter, BlueSky Simulator, SimuLink, OpenWeatherMap API, Google Maps JavaScript API, AWS
- Led the data architecture for a Drone Delivery project, creating data pipelines and a route optimization algorithm, augmenting delivery efficiency by 30%
- Spearheaded ETL process implementation and API integration with AWS, enhancing data efficiency by 40% through Statistical Analysis, Time Series Forecasting, Regression, A/B testing, and Agile methodologies
- Executed a two-phased Energy Efficient algorithm using **Dynamic Programming and Machine Learning**, achieving a **15%** reduction in delivery times and **5%** reduction in costs compared to recent research benchmarks

Data Analyst Intern

May 2022 - Aug 2022

InfyBytes AI Labs Private Limited - the homework app

Bangalore, India

- Tech Stack: PyCharm, EDA, Regression, Tableau, Seaborn, Excel, Linkedin and Internshala Talent Insight Analysis
- Initiated advanced Python scripting to analyze HR datasets resulting in a 10% improvement in operational efficiency
- Implemented data-driven adjustments to recruitment, retention, and compliance strategies, catalyzing a 12% boost in annual workforce productivity and utilized Tableau & Seaborn to visually represent findings and forecasts

Python Developer Intern

Mar 2021 - June 2021

 $CodeSpeedy\ Technology\ Private\ Limited$

 $Hyderabad,\ India$

- Tech Stack : NLTK, TensorFlow, Keras, Scrapy, PyTorch, Scikit-Learn
- Built a ChatBot, mastering text-processing and response generation, achieving a 95% user satisfaction rate. Engineered an ML model for heart attack prediction using predictive analytics, amplifying accuracy by 20%
- Published custom projects on 'Coders Packet'. Link: https://coderspacket.com/contributor/Anoushka

ACADEMIC PROJECTS

WellBot: AI Health Support Chatbot | NLP, scikit, NLTK, SVC, Decision Tree

Feb 2024 - May 2024

• Implemented a mental health support module within an NLP-powered chatbot, increasing user engagement by 25%; connected over 2,000 users to 500+ healthcare specialists and better symptom classification accuracy by 13%.

Smart TextBook Exchange Web Application | Java, SpringBoot, MongoDB, Postman, REST | Sept 2023 - Dec 2023

• Led an **Agile** team of 4 to develop a web application for trading over **1,500**+ used textbooks, using **Spring Boot and Mongo**. Boosted speed by **25**% and user satisfaction by **API integration and testing with Postman and REST**.

Lightweight Encryption Methods for IoMT: An Evaluation | ML, Encryption Methods

Feb 2023 - May 2023

• Championed a 3 member team-study on **lightweight encryption algorithms**, refining IoMT medical imaging security. Performed an analysis of **RSA**, **AES**, and **RC4** leading to a novel algorithm, enriching encryption speed by 90%.

Hybrid Movie Recommendation System | Python, ML, NLP, SVM, KNN, TF-IDF, Git

Sept 2022 - Dec 2022

• Engineered a hybrid recommender system harnessing 25 million ratings, amalgamating popularity, content, collaborative-filtering, and latent-factor, resulting in a notable 2.6% precision uplift over conventional benchmarks