

# ANOUSHKA MERGOJU

New York, United States | [amergoju@syr.edu](mailto:amergoju@syr.edu) | [LinkedIn](#) | [GitHub](#) | [Website](#)

## EDUCATION

- Syracuse University** - College of Engineering and Computer Science, Syracuse, New York Aug 2022 - May 2024  
Master of Science in Computer Science (GPA: 3.4/4.0)
- Graduate Research Assistant, EECS Excellence Scholar, EECS Summer Research Grant Recipient (\$5000), SU WiSE, SU IEEE, SU Residential Safety Aide, Bloomberg Accelerator Summer School Program Fellow 2023, WiDS Ambassador 2024
  - Relevant Coursework:** Applied NLP, Machine Learning, Data Science, AI, Object Oriented Design in Java, Data Structures, Design and Analysis of Algorithms, Operating Systems, DBMS, Social Media and Data Mining, Computer Architecture
- GITAM University** - School of Technology, Hyderabad, India July 2018 - July 2022  
Bachelor of Technology in Computer Science and Engineering (GPA: 3.75/4.0)
- Graduated First Class with Distinction, Merit Scholarship Recipient x2, ELTAI Action Research Project Winner
  - Relevant Coursework:** DBMS, Data Structures, Software Engineering, AI, ML, Cloud, Data Mining and Warehousing, DAA

## TECHNICAL SKILLS

**Languages/Databases:** Python, R, SAS, SQL, Java, C#, C/C++, HTML/CSS, JavaScript, SSMS, Mongo, MySQL, Oracle, Postgre  
**Frameworks:** TensorFlow, Keras, Scikit, Numpy, PySpark, XGBoost, OpenCV, SpaCy, Pandas, Django, HuggingFace, Scala, NodeJS, ReactJS, NextJS, TailwindCSS, VueJS, Flask, SpringBoot, Maven, Gradle, JUnit, RAG, LangChain, Selenium, PyTorch  
**Tools:** Tableau, Power BI, Hadoop, Hive, Kafka, Excel, Spark, Streamlit, Docker, Kubernetes, Git, Jira, Neo4j, Databricks, Simulink  
**IDEs:** RStudio, Jupyter, Looker, Visual Studio, PyCharm, Colab, Weka, Eclipse, IntelliJ, Netbeans, Kaggle, Sublime Text  
**Cloud, OS and APIs:** Windows, AWS, Azure, GCP (BigQuery), Linux/Unix, Ubuntu, CentOS, REST, API Testing and Integration  
**Methodologies:** Statistical Modeling, ETL, Agile, CI/CD, GenAI, LLMs, A/B Testing, MLOps, DevOps, SDLC, Data Storytelling  
**Certifications:** PagerDuty DevOps, Azure Data Engineer Associate, Azure Data Science Associate, AWS Cloud Practitioner

## WORK EXPERIENCE

- Machine Learning Researcher**, Syracuse University - Syracuse, New York June 2024 - Present
- Built AI-driven systems using SAS, PyTorch and TensorFlow to predict resource optimization, improving accuracy by 25%
  - Enhanced data processing efficiency by 30% using SQL for database optimization and Python for data cleaning and analysis
  - Enhanced monitoring and observability using Kafka and Neo4j for issue resolution, scaling models using Kubernetes
  - Tech Stack:** Python, SQL, SAS, ML, Data Modeling, Predictive Analytics, TensorFlow, Kubernetes, Kafka, PyTorch, Azure
- Operations Research Analyst**, Syracuse University - Syracuse, New York May 2023 - Dec 2023
- Directed data architecture for a Delivery Logistics project, creating data pipelines with PySpark, boosting efficiency by 30%
  - Improved data efficiency by 40% through ETL processes and AWS integration (Lambda, S3, KMS, CloudWatch, CloudTrail)
  - Created an algorithm, reducing delivery times by 15% and costs by 5% using dynamic program., greedy methods, and ML
  - Validated and refined drone transportation routing strategies with Simulink and Bluesky, improving energy efficiency
  - Tech Stack:** ML, SSMS, Statistics, PySpark, SimuLink, OpenWeatherMap API, Google Maps API, AWS, Bluesky Simulator
- Data Analyst**, InfyBytes AI Labs Private Limited - Bengaluru, India May 2022 - Aug 2022
- Increased operational efficiency by 10% with advanced Python scripts for data analysis of an EdTech product
  - Boosted workforce productivity by 12% using data-driven strategies, visualized in Tableau to communicate findings
  - Applied ML techniques to identify patterns and recognize hiring trends, improving efficiency by 5%
  - Tech Stack:** PyCharm, Data Transformation, EDA, Regression Analysis, Tableau, Excel, LinkedIn Talent Insight Analysis
- Machine Learning - Python Developer**, CodeSpeedy Technology Private Limited - Hyderabad, India Mar 2021 - June 2021
- Built and deployed a chatbot with 95% user satisfaction, utilizing natural language processing and machine learning
  - Developed a heart attack health prediction model, improving prediction accuracy by 20%
  - View source code: <https://coderspacket.com/contributor/Anoushka>
  - Tech Stack:** Machine Learning, NLTK, TensorFlow, Keras, Scrapy, PyTorch, Scikit-Learn

## PROJECTS

- Portfolio Website (Web Application Development)** May 2024 - June 2024
- Developed a portfolio utilizing multiple technologies for navigation, rendering, responsive design, and backend support
  - Tech Stack:** React.js, HTML/CSS, Next.js, Node.js, npm, TailwindCSS, JavaScript, Vercel, GitOps
- WellBot: AI Health Support Chatbot (AI, NLP and ML)** Feb 2024 - May 2024
- Implemented a mental health support module within an NLP-powered chatbot, increasing user engagement by 25%
  - Configured a model connecting over 2,000 users to 500+ healthcare specialists and better classification accuracy by 13%
  - Tech Stack:** Jupyter, NLP, SVC, Decision Tree, ChatBot Interface, Web Scraping, GitOps
- Web Searching AI Assistant (AI and ML)** Nov 2023 - Jan 2023
- Developed an AI-powered web searching assistant to enhance search capabilities and user experience
  - Tech Stack:** Streamlit, Python, Pandas, Scikit-learn, Altair, OpenAI LLM, ChatGPT
- Real-Time Event Processing System (Data Engineering)** July 2023 - Oct 2023
- Built a system that consumes and processes real-time event data from Azure Event Hubs, serialized in Avro format
  - Tech Stack:** Python, Azure EventHubs, Apache Spark, Bash
- Smart TextBook Exchange Web Application (Web Application Development)** Feb 2023 - May 2023
- Led an Agile team of 4 to develop a web application for trading over 1,500+ books, using Spring Boot and Mongo
  - Boosted speed by 25% and user satisfaction by API integration and testing with Postman and REST
  - Tech Stack:** Java, IntelliJ, SpringBoot, Maven, Gradle, MongoDB, Postman, REST API, Model-View-Controller (MVC), Agile