Aditya Rangavajhala

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EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY

Atlanta, GA

Master of Science in Computer Science, Concentration in Machine Learning

May 2027

RUTGERS UNIVERSITY

New Brunswick, NJ

Bachelor of Science, Major in Computer Science, Minor in Data Science

May 2024

WORK EXPERIENCE

HEALTHFIRST

New York, NY

Machine Learning Engineer

Jun 2023 - Present

- Accelerated contract reviews by 80% and improved access to policy information by building an agentic chatbot that lets internal teams query and validate data across 1,000+ provider health contracts.
- Engineered a high-performance RAG pipeline with tailored embeddings and principled evaluation, yielding a ~52% performance improvement.
- Improved retrieval precision by 43% by developing an internal LLM evaluation framework that tested agent behavior, response quality, and reliability across diverse policy-based use cases.
- Streamlined data engineering dependency by ~40% and empowered 120+ non-technical users to self-serve insights by translating natural language to SQL on AWS Glue data.

ICURO Santa Clara, CA

Data Science Intern

Jan 2022 – Aug 2022

- Improved time series demand prediction accuracy by 30% and reduced forecasting error by 25% by implementing multi-step training techniques on large manufacturing datasets.
- Enabled a 20% decrease in manual anomaly checks by executing supervised and unsupervised learning experiments in Azure ML Studio using clustering and classification models to detect operational patterns.
- Boosted supply chain forecasting precision by 15% by analyzing large-scale sensor and production datasets in collaboration with data scientists to uncover inefficiencies.
- Drove a 10% improvement in resource planning by presenting key findings to non-technical stakeholders, translating technical insights into actionable business decisions.

PERSONAL PROJECTS

HABBIT - Python, React Native, FastAPI, AWS (Cognito, Lambda, S3, DynamoDB), Expo

Mar 2025

- Led a cross-functional team of four to build a mobile-first platform where users post daily photo proof of habit completion, creating social accountability through a personalized activity feed.
- Designed and implemented a full-stack architecture optimized for scalability, low-latency interactions, and future ML integration to assess image validity.
- Developed backend systems to manage user authentication, media uploads, and habit metadata, ensuring robust data consistency and a seamless front-end experience across Android and IOS.

RHYTHMIA- Python, NumPy, Pandas, Scikit-Learn, Matplotlib, Spotify API

May 2022

- Developed a program that uses the athlete's current heart rate to find songs with a matching BPM.
- Integrated a K-Nearest Neighbors model to identify and queue similar tempo songs within 1 second of heart-rate input.
- Automated dynamic playlist updates to help athletes maintain a consistent pace and reduce fatigue during workouts.
- Applied research from Pearce et al. (2021) linking fast tempo music to the delayed onset of exercise-related mental fatigue.
- Won the Health & Wellness track at HackRU 2022, competing among 120+ participants.

TECHNICAL SKILLS

Languages: Python, SQL, Java, R, C++, HTML/CSS, JavaScript, C, React-Native

Software and Skills: Pytorch, Tensorflow, AWS, Langchain, Numpy, Pandas, Scikit-Learn, Terraform, Azure, GitHub, Jenkins, Spark, Docker, Figma

Cloud & DevOps: AWS (S3, Lambda, EC2, SageMaker, DynamoDB, API Gateway, Bedrock), Azure, Terraform, Docker, Jenkins, GitHub Actions, Kubernetes

Tools & Platforms: Git, Figma, FastAPI, Flask, Streamlit, Jupyter, VSCode