Rahul Chemitiganti

+1-(410)-500-3815 | chrahulansharma@gmail.com | linkedin.com/in/chrahulansharma | github.com/rahulansharma682 | https://rahulansharma682.github.io/

Education

Johns Hopkins University Baltimore, MD, US

Master of Science in Engineering - Computer Science SGPA: 3.67, Expected May 2026 (Open to Dec 2025 Graduation)

Technical Skills

Languages: C, C++, C#, CSS, HTML, Java, JavaScript, MQL, Python, SQL
Data Science and Analytics: NumPy, Pandas, Matplotlib, Seaborn, Power BI, Tableau, Jupyter Notebooks
Machine Learning and AI: TensorFlow, Keras, PyTorch, Scikit-learn, OpenCV, NLTK, Transformers (Hugging Face)
Core CS: Data Structures and Algorithms, Object-Oriented Design, System Design
Areas: Artificial Intelligence, Deep Learning, Natural Language Processing, Software Development, Model Evaluation

Experience

Artificial Intelligence / Machine Learning Engineering Intern May 2025 – Jun 2025
SoKat *Baltimore, MD*
- Developed a hybrid metric combining TF-IDF, BoW, Word2Vec, and BERT to measure data enrichment scores
- Enriched sentences showed a 28% boost in metric scores and higher TTR, indicating greater lexical diversity
- Low-quality sentences showed 35% more divergence, validating the metric's ability to flag confusing generations

Data Analytics Intern Dec 2024 – May 2025
Johns Hopkins University *Baltimore, MD*
- Labelled and validated 500+ outputs, refining evaluation metrics for testing at the CCVL research group

Graduate Course Assistant: Blockchains and Cryptocurrencies Sep 2024 – Dec 2024
Johns Hopkins University *Baltimore, MD*
- Created and executed test cases for autograding blockchain-related assignments on Gradescope
- Assisted in grading 50+ assignments and providing feedback on consensus mechanisms and smart contracts

Software Intern Nov 2023 – Jan 2024
Bosch *Bengaluru, India*
- Developed Simu Bridge, a simulation tool for Programmable Logic Controllers (PLCs) with Modbus server functionality using C# improving automation system testing efficiency by 30%
- Designed a user-friendly interface enabling configuration of 8+ Modbus tags, connection settings, and parallel simulation instances, streamlining workflows for automation engineers

Advanced App Engineering Analyst Jun 2023 – Jul 2023
Accenture *Bengaluru, India*
- Gained hands-on experience in Identity and Access Management (IAM) focusing on 3+ security protocols
- Analyzed 5+ IAM workflows to improve RBAC and compliance with organizational security standards

Projects

Virtual Machine Migration Optimizer for Cloud Resource Efficiency Feb 2024 – May 2024
- Devised a custom VM migration algorithm for energy-efficient container management
- Simulated real-world cloud workloads using CloudSim and the PlanetLab dataset, processing over 10,000 VM migrations per threshold setting
- Benchmarked the proposed algorithm against Maximum-Correlation and Minimum Migration Time algorithms, showing a 20–30% reduction in VM migrations and 10% fewer Service Level Agreement violations
- Optimized VM migration using CPU and memory utilization parameters, reducing shutdowns by 15%, improving cloud resource efficiency

Multi-Language Code Recognizer using Custom Compiler Dec 2023 – Jan 2024
- Constructed a compiler for effectively identifying 4 different programming languages within a single input
- Implemented a lexer using the PLY library capable of recognizing 50+ tokens across Python, C++, C, and Java
- Supports over 10 language constructs including function definitions, variable declarations and control structures.

Accent Detection in Indian Languages through CNN based Spectrogram Analysis Feb 2023 – Jun 2023
- Trained a deep learning model using CNNs for Indian accent classification, achieving 82% accuracy
- Curated and processed a novel dataset of around 7,000 1-minute audio samples from YouTube
- Utilized MFCC preprocessing, extracting 13 coefficients per frame to enhance feature extraction.
- Applied LIME to interpret model predictions, identifying top 10% most influential spectrogram regions impacting classification