

# Rahul Chemitiganti

+1-(410)-500-3815 | [chrahulansharma@gmail.com](mailto:chrahulansharma@gmail.com) | [Linkedin](#) | [Github](#) | [Portfolio](#)

## EDUCATION

### Johns Hopkins University

Master of Science in Engineering - Computer Science

Baltimore, MD

SGPA: 3.67, Expected May 2026

### Amrita Vishwa Vidyapeetham

B.Tech in Computer Science and Engineering

Bengaluru, India

GPA: 9.19, June 2024

## TECHNICAL SKILLS

**Languages:** C, C++, C#, CSS, HTML, Java, JavaScript (React), Python, SQL, NoSQL

**Data Science and Analytics:** NumPy, Pandas, Matplotlib, Seaborn, Power BI, Tableau, Jupyter Notebooks

**AI and LLM Systems:** TensorFlow, PyTorch, Hugging Face Transformers, LangChain, Prompt Engineering

**Tools and Ecosystem:** Git, Docker, Kubernetes, Microservices, AWS (EC2, S3), CI/CD, REST APIs, Linux/Unix

**Areas:** Backend Engineering, Deep Learning, GPU Fundamentals, Software Development, Cloud Computing

## EXPERIENCE

### Artificial Intelligence / Machine Learning Engineering Intern

May 2025 – Jun 2025

SoKat

Baltimore, MD

- Built scalable LLM evaluation pipeline combining TF-IDF, BoW, and BERT to measure agent generated data.
- 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

- Labeled 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 autograder test cases and graded 50+ assignments 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 testing efficiency by 30%.
- Designed a user-friendly interface enabling configuration of more than 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

- Implemented 3+ IAM security protocols and analyzed 5+ workflows to enhance RBAC compliance.

## 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.