




Tejas Ramesh

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EDUCATION

George Mason University

Dec 2029 (Expected)

Doctor of Philosophy in Computer Science

George Mason University

May 2025

Master of Science in Computer Science

GPA: 3.83/4.0

College of Engineering Guindy, Anna University

April 2021

Bachelor of Engineering in Computer Science and Engineering

GPA: 3.39/4.0

RELEVANT COURSEWORK

Courses: Machine Learning, Big Data Analytics, Operating Systems, Analysis of Algorithms, Software Engineering, Object-Oriented Programming, Data Structures, Calculus, Probability and Statistics, Principles of Management

SKILLS AND CERTIFICATIONS

Languages: C/C++, Python, SQL, Java, Bash, MongoDB Query Language (MQL)

Tools: Git/GitHub, MS Excel, Hive, Oozie, Databricks, Jupyter, Tableau, Power BI, Amplitude, Putty

Certifications: IBM-Data Science Professional Certification, AI Engineering Professional Certification, Applied AI Professional Certification

PROJECTS

Triton-Viz: A Visualization Toolkit for GPU Programming on Triton [Link](#) | *Python*

- Triton-Viz is an innovative GPU Programming Visualization Tool developed to enhance the understanding of GPU operations through Triton, a programming language by OpenAI.
- This tool offers valuable insights into kernel execution, memory management, and the optimization of parallel algorithms.
- The tool visualizes fine grained tensor operations across multiple blocks enabling users to understand how their custom GPU kernel gets executed in the backend.

PAPERS

Triton-Viz: Visualizing GPU Programming in AI Courses | *ACM SIGCSE Technical Symposium '25*

EXPERIENCE

Department of Computer Science-George Mason University | *Student Researcher*

March 2024 – Present

Large Language Models (LLMs)

- Performance benchmarking serial and parallel C/C++ codes.
- Comparing performance enhancements suggested by static code analyzers with those of LLMs.
- Focused on building LLM agents that tackle Natural Language (NL) Intent to Code generation tasks in the High performance Computing (HPC) Domain.
- Implemented a capable NL-bash command LLM based on Code Llama by Meta.

Tensors and Visualization

- Conducting research on simplifying AI education.
- Visualizing fine grained Tensor operations of kernels written on Triton (developed by OpenAI) in a highly abstracted GPU programming backend execution. Helping in better understanding of AI algorithms.

LatentView Analytics Ltd. | *Analyst*

August 2021 – July 2023

Worked with the Email Marketing and Product Analytics team of a Major American software giant from San Jose, CA.

- Created and maintained multiple business dashboards to track KPIs that solved business problems.
- Analyzed various aspects of user's product engagement and conducted full fledged customer journeys.
- Automated multiple workflows in Hive and Databricks using Python.

Achievements: SPOT Award X 1, Encore Award X 1