Murali Krishna Maddineni

Atlanta, GA | +1 (470) 478-4859 | mmaddineni1@student.gsu.edu | LinkedIn | GitHub

Education

Georgia State University — Jan 2025 – Present
M.Sc. Computer Science (CGPA: 3.58) Relevant Courses: Operating Systems, Computer Architecture, Machine Learning

GITAM University, Hyderabad — Aug 2020 – Apr 2024
B. Tech, ECE with AIML Specialization (CGPA: 3.4) Relevant Courses: Digital Electronics, Microcontrollers, Data Structures

Experience

Graduate Teaching Assistant, Deep Learning — Aug 2025 – Present
Georgia State University

- Facilitate CSC8851 delivery: lead demos and labs on VAEs, GANs, Transformers, diffusion models, and GNNs; hold office hours, guide students on debugging and tuning, and grade coursework with rubric-based feedback.

- Contribute to faculty research in domain adaptation and transfer learning: literature review, experiment setup and execution, results analysis, and manuscript preparation (LaTeX/BibTeX).

Administrative Assistant — May 2023 – Apr 2024
Centre for Advanced Technology and Solutions, GITAM University

- Supported centre operations while leading development of an NLQ-based internal chatbot with a database backend so staff can retrieve academic and administrative information via natural language queries instead of manual lookups.

- Partnered with the engineering team to design and validate an agent bot for auto-generating UI components from configuration, accelerating internal dashboard and tool prototyping for faculty and staff.

Technical Projects

Artificial Intelligence–Based Voice Assistant — Aug 2023 – Apr 2024
UG Capstone (Academic Project Lead)

- Built and trained sequence models (RNN/LSTM/GRU) for intent classification using Python, PyTorch/TensorFlow, and NumPy/Librosa; achieved 92% intent detection accuracy.

- Designed voice-assistant workflow for intent handling and response generation; led project reviews and presented demo and documentation.

Voice-Controlled LED Automation — May 2023 – Jul 2023
Internship Project

- Developed smart-home lighting prototype with ESP8266 NodeMCU (Wi-Fi, GPIO-based LED control) and integrated Google Assistant via IFTTT Webhooks for voice-triggered automation.

- Implemented firmware (Arduino/Embedded C) for command execution and state handling; documented setup for repeatable deployment.

Skills

Programming & Tools: C, C++, Python, Bash, Git, Linux, VS Code
Embedded & Systems: Embedded systems fundamentals, multithreading, networking (TCP/IP), telemetry (intro)
Platforms & HW: Linux-based systems, GPU/SoC platforms (familiar), Docker (basic)
Testing & Debugging: Unit testing, integration testing, profiling, hardware-software integration debugging
Domain Knowledge: Infotainment/automotive systems (familiar), camera/display/audio pipelines, Wi-Fi/Bluetooth connectivity

Leadership & Community Engagement

Treasurer — Aug 2022 – Apr 2024
G-Electra (Smart Systems Club), GITAM University

- Managed financial operations and budget oversight for the club; ensured transparency and accountability, enabling sustained funding for workshops, hackathons, and member-driven initiatives.

Committee Member, Celebration and Collaboration — May 2025 – Present
Georgia State University

- Advance programmatic efforts for university-wide recognition (e.g., Black History Month, International Week, Women's History Month, Latin Heritage Month), maximizing reach and impact of themed programming; partner with campus units for inclusive, cross-departmental events.

Additional Skills & Interests

Languages: Fluent in English; currently learning Spanish.   **Fine Arts:** Interest in drawing, painting, music and cooking.
Interests: Outdoor and indoor sports (cricket, badminton); video games.