BALA PAVANI KOPPURAVURI

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EDUCATION

Master of Science, Georgia State University — August 2025 - December 2026
Computer Science **GPA 4.2/4.3**

Bachelor of Technology, SRM University AP — August 2021 - May 2025
Computer Science and Engineering **CGPA 9.04/10**

WORK EXPERIENCE

Georgia State University - MORSE Lab (Volunteer) — January 2026 - Present
- Attend weekly MORSE Lab meetings, actively participating in research discussions by sharing ideas and feedback.
- Collaborate with researchers to understand ongoing projects and explore potential research opportunities.

Georgia State University (Graduate Teaching Assistant) — August 2025 - Present
- Mentoring 150+ students in Data Structures using Python course and Principles of Computer Science course.
- Assisting in development of course material, grading and related research.

Coincent (Data Science Internship) — October 2023-December 2023
- Developed Surprise Housing Case Study by data preprocessing and building ML model using GridSearchCV and Ridge Regression, which is used to model the price of houses with available independent variables.
- Data cleaning, Exploratory data analysis, Data preparation is done on imported dataset

SRM University AP (Summer Research Internship) — June 2023-August 2023
- Research on how machine learning is used in Person Authentication and EEG datasets.
- Implemented KNN, SVM on various datasets like EEG.

ILP Overseas (Human Resource Internship) — January 2023-February 2023
- Posted job descriptions online, assisted in interview processes and recruitment from start to finish.
- Succesfully managed the recruitment and onboarding process for employees.
- Assisted with interviewing applicants for Talent Team positions.

PUBLICATIONS

Journal (Published - Scientific Reports) — August 2025

Ch Madhu Bhushan, **Priya Koppuravuri**, Nomitha Prasanthi et al. Deploying TinyML for Energy-Efficient Object Detection and Communication in Low-Power EdgeAI Systems. (Journal Link)

Conference (Accepted - IEEE CINE) — January 2026

Ch Madhu Bhushan, **Priya Koppuravuri**, Nomitha Prasanthi B, Firoz Gazi, Md. Muzakkkir Hussain " Multi-Controller TinyML Architecture for Object Detection with Efficient Communication and Applications"

Patent (Published - Intellectual Property India) — September 2025

Koppuravuri Bala Pavani Lakshmi Priya, Chakka Madhu Bhushan, Nomitha Prasanthi Bisiringi, Fazal Shaik, Siripalli Hemanth Durga Kumar, Firoz Gazi, Md. Muzakkkir Hussain "Multi-Controller TinyML Architecture for Object Detection with Efficient Communication and Applications" - Patent Application Number: 202541087210

Patent (Published - Intellectual Property India) — August 2025

Chakka Madhu Bhushan, **Koppuravuri Bala Pavani Lakshmi Priya**, Surayya Aruvanpuzha, Firoz Gazi, Md. Muzakkkir Hussain, Dinesh Reddy Vemula "System and Method for Air Quality Monitoring and Alert Generation using Artificial Intelligence" - Patent Application Number: 202541000511.

Patent (Published - Intellectual Property India) — October 2024

Fazal Shaik, Meka Naga Nandini Devi, Surayya Aruvanpuzha, Chakka Madhu Bhushan, **Koppuravuri Bala Pavani Lakshmi Priya**, Firoz Gazi, Mohammad Abdussami, Md. Muzakkkir Hussain "ATTENDEDGE: An Edge-AI-based Smart Attendance System using 3D Object Detection" - Patent Application Number:202441077282.

Book chapter (Published) — October 2025

Farha Fatma, **Priya Koppuravuri**, Pratyusha Ghanne, Firoz Gazi, Md.Muzakkkir Hussain "Development of a Deep Learning model for OCT image classification for Central Serous Chorioretinopathy", In Transformtive Technologies in Healthcare: A Deep Dive into AI and Machine learning, Cambridge Scholars Publishing. (Book Chapter Link)

ACHIEVEMENTS

- Awarded Gold Medal in 9th Research Day SRM University AP 2025 for research work "Multi-Controller TinyML Architecture for Object Detection with Efficient Communication and Applications"

PROJECTS

Lung Cancer Detection using CNN (GitHub Link) November 2024 - December 2024

- Built a deep learning model to classify lung cancer into Adenocarcinoma, Benign and Squamous Cell Carcinoma to provide an intuitive interface for easy use by healthcare professionals.
- Analysis is done by using ResNet50 model and of all train test splits using classification metrics accuracy is improved.

Chatbot for mental health support (GitHub Link) January 2024 - May 2024

- Developed using MERN stack aims to provide mental health support through an AI chatbot.
- Functionalities include user registration, login, using chatbot, session booking and access to previous booked sessions.

Predictive Framework for Credit card default risk (GitHub Link) February 2024 - May 2024

- Seven machine learning models are used to predict whether the credit card holders are credible or not credible clients.
- Comparative Analysis is done on all models of all train test splits using classification metrics.

Cancer Detection using Deep learning (GitHub Link) Sept 2023 - December 2023

- Prepared a survey on how VGG architectures in used in detection of various cancers.
- Implemented CNN VGG16 on skin cancer dataset which consists of benign and malignant tumors.
- Implemented Perceptron, ANN, CNN, VGG on various datasets.

SKILLS

Programming Languages	Python, Java, Data Structures, Vue, HTML, CSS, JavaScript.
Database	MySQL, MongoDB.
ML skills	tinyML, IOT, Tensorflow, LLM, NLP, DL, CNN, RNN, LSTM, VGG, Pytorch, CV, Tableau
Professional Tools	Git, Github, VSCode, Colab, Visual Studio, Android Studio.
Transferable Skills	Attention to detail, Flexibility, Communication.

CERTIFICATIONS

- Deep Learning Coursera November 2025
- NPTEL Online Certification in Electronic Systems for Cancer Diagnosis October 2024
- NPTEL Online Certification in Design Implementation of Human-Computer Interfaces October 2024
- NPTEL Online Certification in Data Base Management System September 2023
- NPTEL Online Certification in Soft Skills October 2022