MANDLA SIVA MANOJ | EE21B083 |PR/11/EE/25/083
INDIAN INSTITUTE OF TECHNOLOGY MADRAS | LINKEDIN

EDUCATION AND SCHOLASTIC ACHIEVEMENTS

Program	Institute	% / CGPA	Year
B.Tech in Electrical Engineering	Indian Institute of Technology, Madras	8.28	2025
Class XII (CBSE)	Happy Valley School, Vijayawada	94.2%	2021
Class X (BSEAP)	Sri Sai Vijetha School	10	2019

- Achieved a notable All India Rank of **2424** in Joint Entrance Examination Advanced 2021, reflecting strong academic skills.
- Earned a notable percentile of **99.55** in the Joint Entrance Examination Mains 2021, demonstrating strong academic achievement.
- Achieved All India Rank **76** in Joint Entrance Examination Mains B.Arch 2021, demonstrating strong performance.
- Achieved a remarkable rank of **591** in the **EAPCET** 2021, demonstrating a strong academic performance & competitive aptitude.

PROFESSIONAL EXPERIENCE

Advanced Application Engineering Analyst
Accenture Technology, Bengaluru
20 May - 15 July 2024

- Completed training on **ERP** concepts and **SAP**[#], building a strong understanding of critical business tools.
- Contributed to the **British Telecom Application Management Services** (BT AMS) project, gaining valuable hands-on experience with SAP SuccessFactors, which supported more than **100,000** users.
- Enhanced problem-solving skills by resolving over **5+ incidents** and **service requests**, significantly reducing response time by **7%** and boosting issue resolution efficiency in the BT AMS environment.
- Collaborated with the team, enhancing communication and teamwork to quickly address project issues.

PROJECTS

Route Optimizer

- Developed a route optimizer using **Dijkstra's** & **A star** algorithms to find the shortest path between locations.
- Applied dynamic programming to optimize multi-stop routes, enhancing performance and efficiency.
- Optimized the tool to provide best routes and costs for any destination, simplifying route selection.

Library Management System

- Developed a Library Management System (LMS) using **C++** and **Object-Oriented Programming** (OOP) principles, significantly enhancing the overall efficiency of library operations and reducing manual errors.
- Implemented comprehensive features including adding new books, issuing and returning books, searching for books, and tracking overdue items, ensuring smooth and well-organized library management.

Personal Portfolio

- Developed a personal portfolio website using **HTML, CSS,** and **JavaScript** to showcase skills and projects.
- Configured and deployed the site on **GitHub Pages**, ensuring smooth hosting and efficient management.

Applied Programming Lab
(Course project)
Prof Nitin

- Used **Gradient Descent** to efficiently optimize 1D and 2D functions and created animations with Python.
- Coded a circuit solver in Python for Combinational Circuits (with basic logic gates) using **Topological Sort.**
- Implemented the **Simulated Annealing** method to effectively optimize the Travelling Salesman Problem.

Credit Card FraudShield

- Developed a model for detecting **fraudulent transactions** using **Random Forest, SVM,** and **Decision Trees**.
- Achieved **92%** accuracy in testing by selecting the relevant features, enhancing the model's performance.

Fundamentals of Deep Learning
(Course project)
Prof Chandra Sekhar

- Compared **weight update** rules Delta, Generalized Delta, AdaGrad, RMSProp, and AdaM for an MLFFNN[§] with two hidden layers on an image dataset, achieving up to a **10%** improvement in accuracy.
- Evaluated **normalization** techniques (none vs. batch) on MLFFNN with AdaM, reducing training error by **15%**.
- Implemented a stacked autoencoder with **3** layers for pre-training a Deep Feedforward Neural Network (DFFNN), improving performance by **20%** compared to a DFNN trained with only labelled data.
- Applied MLFFNN using VGGNet and GoogLeNet features, resulting in a **12%** boost in classification accuracy.
- Developed an advanced **image captioning model** using a CNN[¶], NetVLAD encoder, and a single hidden layer RNN[^] decoder, successfully achieving a significant **25%** improvement in caption accuracy.

COURSES AND SKILLS

Courses	Data structures and algorithms	Applied Programming and Lab
	Fundamental of Deep learning	Database Management Systems
	Machine learning techniques*	Probability Foundations for electrical engineers
	Mathematical tools for computer science*	Linear Algebra for engineers
Languages & Tools	C++, Python, C, HTML, CSS, SQL, NumPy, Matplotlib, Sci-Kit Learn, TensorFlow, Pytorch, LaTeX	

POSITIONS OF RESPONSIBILITY

Project Management Team, Strategist
CFI[$]
2023-2024

- Led a **6** member team, providing guidance, driving performance and achieving collective objectives.
- Developed and implemented strategies to boost team performance, productivity, and improvement.
- Reviewed **10+** Club projects under CFI to evaluate progress and provide actionable recommendations.
- Collaborated with project teams to support the planning and execution of various events, including Open House, Hackathons, G20 Summit, Research Conclave, Summer School throughout tenure.
- Managed logistics for various events, with an average footfall of **10000+** and ensuring smooth operations.

Saathi Mentor
2024-present

- Guided **3** first-year students in adapting effectively to IIT Madras's academic and social environment.
- Offered academic advice, providing guidance on courses, study strategies, and time management.
- Led **4** informative orientation sessions on campus resources, academic policies, and student life.
- Maintained detailed records of mentee progress to support program enhancement and improvement.

EXTRACURRICULARS

Competitive Coding	• Participate in contests and solve problems using C++ on **Codeforces** and **CodeChef** as a pastime activity.
NSO[£]	• Participated in **Yoga** through the NSO programme at IIT Madras to enhance fitness, mental well-being.
EEA[¥]	• Captained the **cricket team** in the EEA tournament, showcasing leadership and teamwork in gameplay.
Hobbies	• Enjoy **swimming**, cricket, reading books, and **chess** for a mix of physical, intellectual, and leisure activities.

*-ongoing courses | $-Centre For Innovation | ¥-Electrical Engineering Association | £-National Sports Organisation | ¶-Convolutional Neural Networks
#-Systems Applications and Products in Data Processing | §-Multilayer Feed Forward Neural Network | ^-Recurrent Neural Networks