NIVEDITHA MADEGOWDA

Los Angeles, California | 213-681-4025 | madegowd@usc.edu | www.linkedin.com/in/niveditha12m | https://niveditha-7.github.io

EDUCATION

University of Southern California	Los Angeles, California
Masters in Electrical and Electronics Engineering (focus on machine learning)	January 2024-May 2025

- GPA: 3.8

TECHNICAL SKILLS

Programming languages - C++, Python, C# | Version Control tools - Git, Perforce, Jira, Bitbucket | OS : windows, MAC OS, Linux
Technology - Machine Learning, Deep Learning, SQL, Data Analysis , Augmented and Virtual Reality, Game Development

EXPERIENCE

WorkUp (Viterbi Startup Garage)	**Los Angeles, California, US**
Lead AI Engineer Intern	June 2024-July 2024

- Conducted Research on developing an AI agentic framework using gpt APIs, Langchain Framework and python to streamline job application process
- Increased efficiency of a content-based machine learning job recommendation system from 67% to 84%

Element Technologies	**Bengaluru, Karnataka, India**
Senior Software Engineer	September 2022-December 2023

- Created a summary and question-answering tool with chat-GPT API and LangChain framework using Python.
- Collaborated on Blueconic, a customer data platform, to provide insights to a hospitality client in the US by analyzing user profiles and writing scripts in AI Workbench in python to recommend suitable content to visitors
- Built Proof of Concepts of applications in Virtual Reality reducing physical store costs by 50% with Unreal Engine and C++

Tata Elxsi	**Bengaluru, Karnataka, India**
Software Engineer	September 2018-September 2022

- Applied design principles in C# to debug, optimize and add features to a data-driven game template for automation of game development process
- Devised prototypes for multiplayer games integrated with AI-driven characters utilizing advanced pathfinding algorithms, enhanced gameplay dynamics on Unreal engine platform with C++ and on unity 3D with C#
- Selected for the Young Leads Program, at Knolskape honing leadership and decision-making skills
- Mentored junior engineers on VR and games development using Oculus head set/ Unreal and Unity game engine

Indian Space Research Organisation (ISRO)	**Bengaluru, Karnataka, India**
Intern	January 2018-April 2018

- Collaborated with an agriculture expert and an engineer to build a machine learning project aimed at classifying healthy/diseased papaya leaves.
- Involved in Applying Image processing techniques to extract features and use Random Forest Algorithm to predict the results.

PUBLICATIONS

- Author of Paper titled "Plant disease detection using Machine Learning" published in IEEE website - https://ieeexplore.ieee.org/document/8437085

ACHIEVEMENTS

- STELLAR CONTRIBUTION Award for outstanding performance on a key project at Tata Elxsi (2021-2022).
- BRAVO Award for excellence in project contributions at Tata Elxsi (2019-2020).

ACADEMIC PROJECTS

- Trojan Map - Developed and implemented a comprehensive graph-based mapping application featuring advanced algorithms including Dijkstra, Bellman-Ford, and Traveling Salesperson solutions; optimized real-time queries, cycle detection, and topological sorting to enhance performance and scalability.
- Machine Learning - Engaged in advanced projects involving time series classification, feature extraction, and density estimation, as well as implementing PCA and multi-class classification models with logistic regression and SVMs
- FCMs for Tiger conservation in India Collaborated with wildlife biologists to develop and implement a dynamic Fuzzy Cognitive Map (FCM) model, analyzing causal relationships in tiger conservation by leveraging expert insights, matrix operations, and iterative state evolution for real-time system predictions