

MANIKANDAN MEENAKSHI SUNDARAM

Boston, MA

+1(617) - 238 - 4085 | manikandan311001@gmail.com | [LinkedIn](#) | [github](#)

Education

Northeastern University <i>Master's in Analytics. 3.67/4</i> Club: Google Developer Students Club, Data Science hub	Sep 2023 – Dec 2025 Boston, MA
S A Engineering College <i>Bachelor's in Computer Science and Engineering. 8.07/10</i>	Aug 2019 – May 2023 Chennai, Tamil Nadu

Experience

Larsen & Toubro <i>Python Developer Intern</i> <ul style="list-style-type: none">Engineered a voice search module for the company's web application, driving 25% engagement growth.Optimized multiple APIs to enable voice search functionality, reducing query processing time by 40%.Collaborated with the development team to design and deploy the module, demonstrating strong teamwork.Developed a dashboard for comprehensive user insights, leading to a 20% increase in identified user pain points, directly informing product improvements.	Apr 2023 – Jul 2023 Chennai, Tamil Nadu
GOX.ai <i>Machine Learning Intern</i> <ul style="list-style-type: none">Analyzed images and converted them from grayscale to RGB and other formats.Trained the model to differentiate between hair and shadow using basic color differences.Implemented supervised learning algorithms, such as RNN, to develop the model.Managed large databases and employed various professional techniques to collect, analyze, and interpret data.	Sep 2021 – Feb 2022 Chennai, Tamil Nadu

Projects

Text2sql AI Chatbot Ongoing Python <ul style="list-style-type: none">Utilized OpenAI API and LangChain to convert human-readable commands into accurate SQL queries, processing data from 6,800 rows and 43 columns.Implemented few-shot and chain-of-thought prompts to enhance the model's contextual understanding and performance.Employed a RAG vector database with 10,000+ vectors to improve data retrieval and query precision.Deployed the model in a Red Hat OpenShift environment for seamless scalability, supporting over 50 concurrent users, enabling efficient processing in production settings.	Apr 2024
Job Posting Analysis Python <ul style="list-style-type: none">Orchestrated a job posting classification project, achieving 75% accuracy via machine learning.Evaluated Logistic Regression, LightGBM, KNN, and SVM algorithms, optimizing precision.Incorporated accuracy, precision, recall, and F1-score metrics alongside visualizations for thorough model evaluation.Delivered actionable insights, improving model accuracy by 10% through class imbalance handling and feature engineering.	Apr 2024
Ad Classifier Model Python <ul style="list-style-type: none">Developed a multimodal classifier for videos, combining video, text, and speech data to answer binary questions with a 57% overall agreement percentage.Preprocessed over 1000 video frames and tokenized 10,000+ text and speech captions, optimizing model precision (57.21%), recall (57.22%), and F1 score (57.02%).Improved performance by over 15% through data augmentation and model fine-tuning.	July 2024

Technical Skills

Programming Languages: Python, R, SQL,HTML
Data Processing & AI Libraries: Matplotlib, Pandas, Numpy, Keras, Seaborn, OpenCV, TensorFlow, Django/Flask, NLTK, SpaCy
Tools: Postgres, Google Colab, spark, Excel, VSC, Tableau, Power BI, GPT, Langchain, Selenium, OpenShift AI, Hadoop