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LinkedIn | GitHub

AI & ML Engineer (Entry-Level)

Passionate AI engineer with hands-on experience building ML applications using RAG, LLMs, and deep learning models. Seeking an entry-level AI/ML role to apply skills in solving real-world problems efficiently with a strong focus on clear, simplified implementations.

Education

Sinai University
BSc in Information Technology (Expected 06/2025)
- Relevant Coursework: Machine Learning, Data Structures, Algorithms, Computer Vision, NLP

Skills

Programming: Python, C, Scratch
AI/ML: Supervised & Unsupervised Learning, Transformers, RAG, Prompt Engineering, Vector Databases, Deep Learning
Tools: TensorFlow, PyTorch, Chroma, Gemini Pro, Git, VS Code
Soft Skills: Teaching, Simplifying Complex Concepts, English (Proficient)

Certifications

- CS50X: Introduction to Computer Science (Harvard University)
- CS50AI: Introduction to Artificial Intelligence with Python (Harvard University)
- Machine Learning Specialization (Stanford | DeepLearning.AI)
- How Transformer LLMs Work (DeepLearning.AI)
- Google 5-Day Gen AI Intensive (Google x Kaggle)

Projects

AI Legal Aid Assistant (Capstone – Google GenAI)
Built a tool using Retrieval-Augmented Generation (RAG), embeddings, and Chroma vector databases to help underserved communities understand legal documents in plain language, leveraging Gemini Pro with few-shot prompting and agent-based guidance.
Tech: Python, Gemini Pro, Chroma, RAG, Prompt Engineering

Traffic Signs Recognition
Applied deep learning to classify road signs, achieving high accuracy on benchmark datasets using CNN architectures.
Tech: Python, TensorFlow, Keras

Trivia Web Application
Designed and implemented a user-interactive trivia game with a clean UI and dynamic question logic.
Tech: Python, Flask, HTML/CSS

Romania Map Problem (Pathfinding & Optimization)
Implemented pathfinding algorithms to solve the Romania Map traversal problem efficiently.
Tech: Python, Graph Algorithms

Search & Pathfinding
Used BFS for shortest path calculation between actors in a "Degrees of Separation" problem. Built a Tic-Tac-Toe AI using Minimax for optimal decision-making.
Tech: Python

NLP & Transformers
Parsed sentence structures using CFGs and used BERT for masked word prediction while visualizing attention scores for learning explainability.
Tech: Python, Transformers, NLTK, PyTorch

Optimization & Constraints
Developed a crossword puzzle generator using Constraint Satisfaction Problems (CSPs) to dynamically generate valid crossword layouts.
Tech: Python

Machine Learning Projects
- **Shopping Prediction:** Built a KNN classifier to predict user shopping behavior across 12,000+ sessions.
- **Nim Game AI:** Developed a Q-learning agent for mastering Nim through reinforcement learning.
- **Game AI - Minesweeper:** Created an AI using logical inference to detect safe and mined cells accurately.
Tech: Python, Scikit-learn

Additional Notes

- Eager to contribute to a team while continuously growing and applying AI/ML knowledge to impactful projects.
- Available for internships or entry-level roles immediately.