Mahmoud Ahmed Fawzy

Machine learning Engineer

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SUMMARY

A highly motivated Artificial Intelligence engineer employs data and AI to solve real-world problems, optimize businesses, and enhance people's lives. Looking for a job where I can use my skills in AI, programming, Data Science, Data engineering, and various ML/DL techniques to create impactful solutions that will have a significant impact on a variety of fields. I'm excited to be a part of a team that applies data and AI to morally and responsibly develop effective solutions.

EXPERIENCE

1. **Machine Learning Engineer Intern at DEPI:**
   Duration: Oct 2024 - present
   - Developing and optimizing machine learning models and training pipelines using AWS services such as SageMaker, Lambda, and S3.
   - Collaborating on various AI-related projects, including model evaluation and deployment on AWS cloud platforms.

2. **Deep Learning Engineer Intern at Overseas company:**
   Duration: Nov 2024 - present
   - Gaining in-depth experience in deep learning techniques and frameworks.
   - Working on cutting-edge projects involving neural networks and large-scale datasets.
   - Enhancing skills in AI and deep learning to solve complex problems.

3. **Artificial intelligence internship** at **ITI (Information Technology Institute):**
   Duration: 2 months
   Key Skills: Python, Natural Language Processing (NLP), Computer Vision (CV), Large Language Models (LLMs), Power BI
   - Gained hands-on experience in AI and data science techniques.
   - Worked on various projects involving NLP and CV to solve real-world problems.
   - Explored Power BI for data visualization and reporting.

4. **Machine Learning Training | Orange:**
   Duration: 1 month
   - Learned the fundamentals and advanced concepts of machine learning.
   - Applied techniques to practical case studies and real-world data.

PROJECTS

- **Attendance System Using Face Recognition:**
  - Technologies Used: Python, OpenCV, YOLO face recognition, Streamlit (for deployment) , NumPy, Deep Learning, Computer Vision.
  - Description: Developed and deployed an attendance tracking system leveraging AI for face recognition. The system required only a single photo per person for accurate identification, recorded attendance automatically every 30 seconds, and summarized the data at the end of the session, exporting it to a CSV file for easy record-keeping and analysis.

- **Chatbot for Health Insurance:**
  - Technologies Used: Python, Gradio, pandas, API integration, Machine Learning, Data Analysis
  - Description: developed an interactive chatbot that processes health insurance datasets. Users can input questions related to the dataset, and the chatbot generates Python code in real-time to analyze and return results using the pandas library. The chatbot is powered by Groq, which interprets user queries and generates executable code for data analysis.

- **Machine Translation Model (Seq2seq, LSTMs):**
  - Technologies Used: Python, TensorFlow ,Natural Language Processing (NLP), Deep Learning, Sequence-to-

Sequence Models, Long Short-Term Memory (LSTM) Networks.

- Description: Developed a neural machine translation system capable of translating sentences from English to multiple languages including Arabic, Italian, German, and French. Implemented a sequence-to-sequence architecture using Long Short-Term Memory (LSTM) networks to effectively capture and translate linguistic patterns. The model demonstrates the ability to handle complex language translation tasks, showcasing proficiency in advanced NLP techniques and multi-lingual deep learning applications.

EDUCATION

- **Bachelor of Computer Science and Artificial Intelligence**
  - Helwan University, Helwan, Egypt.
  - Expected Graduation: June 2025 (September 2021 – Present).
  - Currently in the Fourth year of the Artificial Intelligence program.
  - Specializing in advanced AI techniques and applications.
  - Relevant Coursework: Machine Learning, Deep Learning, Natural Language Processing, Computer Vision.
- **Egyptian High-school General Certificate (Thanawya Amma), Cairo, Egypt (2008 – 2021).**

COURSES

- CCS50: Introduction to Computer Science - Harvard University (edX)
- Artificial Intelligence Fundamentals from IBM
- Machine Learning specialization from Coursera
- Deep Learning, a 5-course specialization by deeplearning.ai

TECHNICAL SKILLS

- **Programming Languages:** Python, JavaScript, C/C++, Java, F#.
- **Web Development:** HTML, CSS, JavaScript.
- **Database:** MySQL.
- **Machine Learning:** Sklearn, NumPy, pandas, PyTorch, TensorFlow; experience in supervised learning, deep learning, and YOLO-based models.
- **AI & Data Science:** Computer Vision (CV), Natural Language Processing (NLP), Large Language Models (LLMs).
- **Data Structures & Algorithms:** Strong proficiency in Data Structures, Algorithms, and Object-Oriented Programming (OOP).
- **Development Tools: Docker, Label Studio, Azure Data Studio, VS Code, Jupyter, Git/GitHub.**
- **Cloud Deployment:** Experience deploying applications with **Streamlit Cloud.**
- **Cloud Computing: AWS services**
- **Office Suite:** Microsoft Word, Excel, PowerPoint

EXTRA

- **Personal Skills**: Responsibility, Teamwork, Communication Skills, Analytical thinker, Flexibility, Innovative
- **Interests:** Football, Chess
- **Languages:** English (Very good to Excellent), Arabic (Native proficiency)