
Yoeel Dawod

Machine Learning Engineer



About Me

- Hello, I'm Yoeel Dawod.
 - I am a Machine Learning Engineer passionate about leveraging AI to solve real-world problems and drive business innovation. With two years of experience in machine learning, MLOps, and data science, I specialize in building, deploying, and optimizing ML models for scalable applications.
 - I have expertise in deep learning using PyTorch, cloud-based ML solutions with Microsoft Azure, and MLOps pipelines for efficient model deployment. Additionally, I am skilled in data analysis and visualization, utilizing Python (Pandas, NumPy, Matplotlib, Seaborn) and Power BI to uncover insights that support data-driven decision-making.
 - My expertise spans neural networks, computer vision, and reinforcement learning, enabling me to develop end-to-end AI solutions tailored to business needs. By integrating machine learning models seamlessly into applications and leveraging interdisciplinary skills in software engineering, data science, and domain expertise, I ensure optimized performance, scalability, and actionable insights.
 - Through effective collaboration with data scientists, software engineers, and stakeholders, I deliver AI-powered solutions that drive business growth and technological innovation.
 - Let's bring AI solutions to your business—efficient, scalable, and impactful. 🚀
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My Story

- I'm a CSIT student from Egypt, and living here has been an incredible experience—the vibrant sky, the warm-hearted people, and the constant sense of community. However, my journey wasn't always easy. Back in high school, I was a student at a STEM school, and those three years were tough. I struggled academically and found it hard to stay on track, feeling disconnected from my true passions. I wasn't a great learner at the time, but giving up was never an option.
 - After high school, I decided to start fresh at university. I realized that the problem in high school was that I wasn't pursuing what truly excited me. Once I entered university, everything changed. I dedicated myself fully to learning and growing. I began taking online courses, attending bootcamps, and diving deep into the world of computer science.
 - It was during this time that I stumbled upon the fascinating world of Artificial Intelligence, specifically Machine Learning. The potential of ML captivated me, and I was hooked. I became committed to mastering it. For the past two years, I've been relentlessly training, building my skills, and gaining hands-on experience. Today, I can proudly say that I'm a professional in the field of Machine Learning and Data Science.
 - Looking back, I am proud of what I've achieved so far, but this is just the beginning. I'm ready to take on the next challenge and continue pushing the boundaries of what I can do in the ever-evolving world of AI.
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Unique Selling Points

- Scalable AI Model Deployment – Experienced in integrating machine learning models into production environments, ensuring efficiency, scalability, and realworld impact through optimized deployment strategies.
 - Proficiency in Leading AI Frameworks – Skilled in leveraging frameworks like PyTorch and Microsoft Azure to develop, train, and deploy cutting-edge machine learning models tailored to business needs.
 - End-to-End AI Pipeline Development – Capable of handling the full AI lifecycle, from data preprocessing and model training to cloud-based deployment and ongoing model monitoring for continuous improvement.
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Educational Background



Egypt-Japan University of Science and Technology

2022 - 2026

B.Sc. Computer Science and Information Technology (Artificial Intelligence and Data Science)



Digital Egypt Pioneers Initiative: Microsoft
Machine Learning Engineer

2024 - 2025

Digital Egypt Pioneers Initiative provided by the Egyptian Ministry of Communication.

Skills

- Data Analysis (Python, Pandas, power BI, Matplotlib)
- Machine Learning (Python, Pytorch, Azure AI)
- Data Base (MS SQL Server, Mysql)
- Web development (MERN stack)

Work Experience

Titanic data analysis

October 2024 - February 2025

- an analysis on dataset related to the famous incident of the titanic ship.
- a project requested by the Digital Egypt Pioneers Initiative.
- extracting insights relating the number of survival and its relation to the sizes of the families.

Arabic Hand written Classification

September 2024 - December 2024

- a convolutional neural network to classify hand written Arabic letters.
- the model achieved a high accuracy in reading Arabic hand writing .

Offered Services

Machine Learning Model Development	End-to-End AI Solutions	Computer Vision	Data Analysis
Design, develop, and optimize machine learning models for real-world applications, including regression, classification, clustering, and recommendation systems.	Build complete AI pipelines, from data ingestion and preprocessing to deployment and monitoring.	Build models for object detection, image classification, and image segmentation	data analysis and feature engineering, with data visualization using powerBI

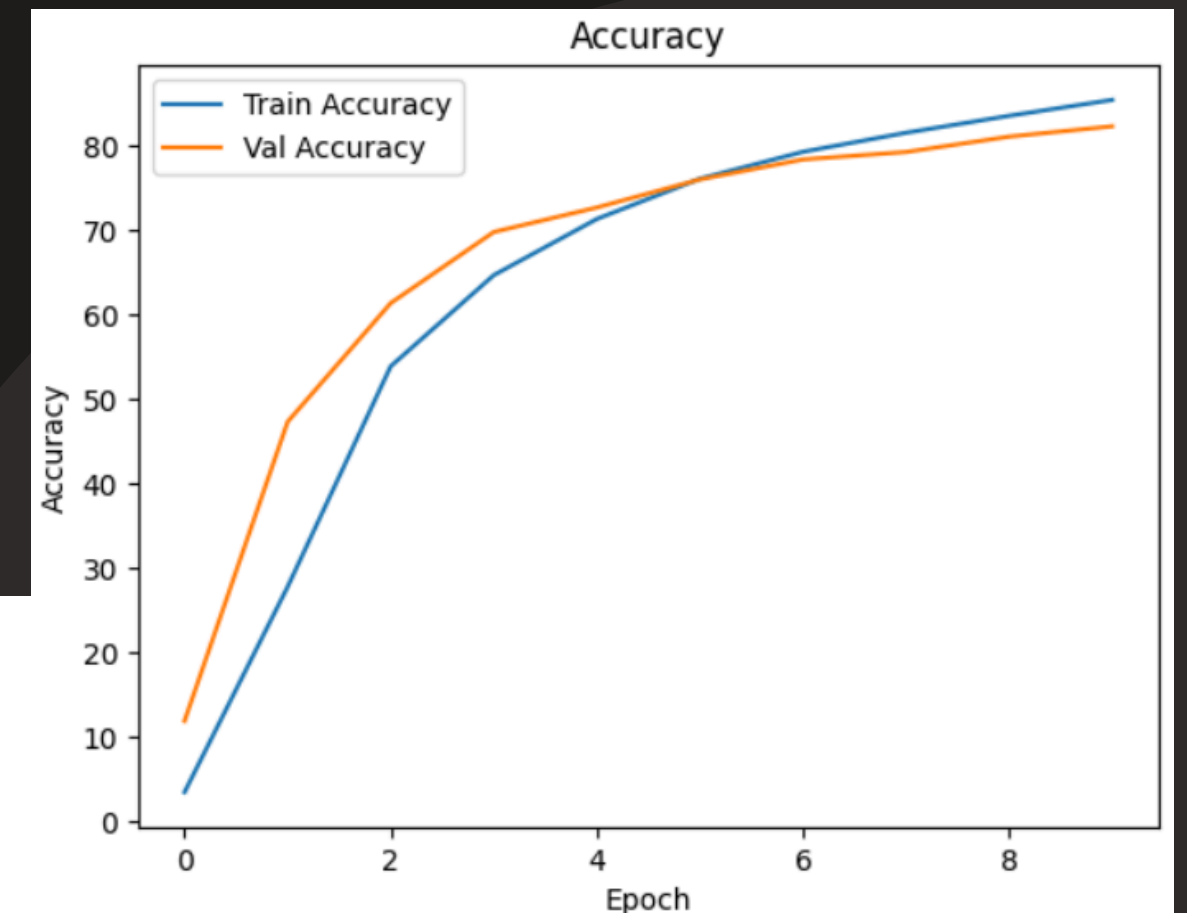
Projects

Arabic Handwritten classification

Developed a Convolutional Neural Network (CNN) using PyTorch to classify handwritten Arabic letters. The model was trained and evaluated on a curated dataset sourced from Kaggle, showcasing its ability to recognize Arabic characters with high accuracy. it achived an accuracy above 80% in classification.

Technologies Used

- PyTorch
- Python (NumPy, Pandas, Matplotlib)
- OpenCV (for image preprocessing)
- Kaggle API (for dataset management)



Projects

Encoder for Data Transformation

Developed and implemented a data encoding step as part of a preprocessing pipeline. The encoder transforms raw data into a structured and efficient format for downstream processing. This project demonstrates expertise in feature engineering and the optimization of machine learning workflows

Technologies Used

- Python (Pandas, NumPy) for encoding logic and data manipulation
- Scikit-learn for additional preprocessing utilities

```
class EncodingAnalyzer:

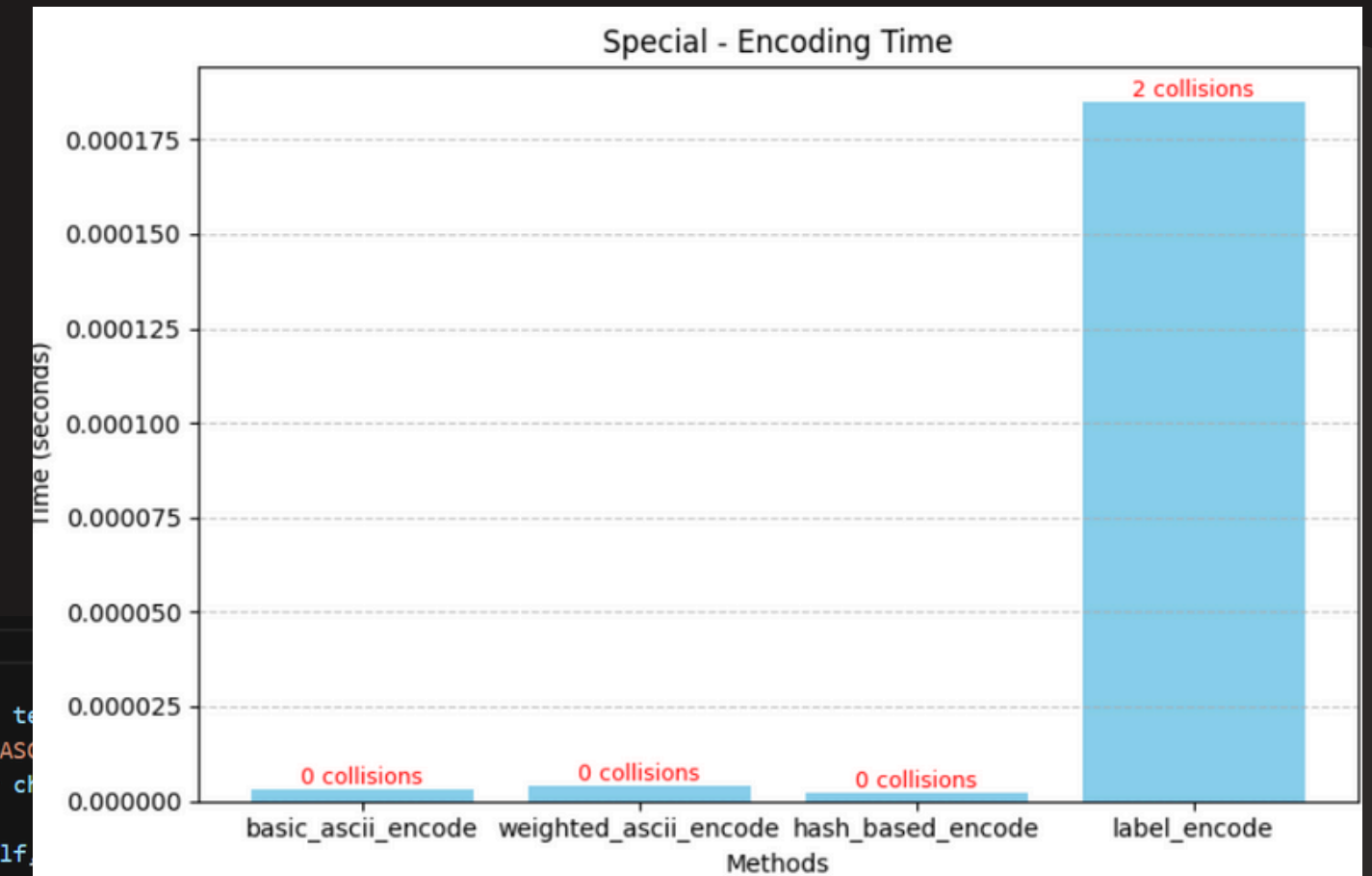
    def basic_ascii_encode(self, text):
        """Calculate the sum of ASCII values for each character in the text.
        This method is used for basic encoding and collision detection.
        """
        return sum(ord(char) for char in text)

    def weighted_ascii_encode(self, text):
        """Calculate weighted ASCII encoding.
        This method is used for weighted encoding and collision detection.
        """
        return sum((i + 1) * ord(char) for i, char in enumerate(text))

    def hash_based_encode(self, text, mod: int = 1_000_000_007):
        """Compute a hash-based encoding of the text.
        This method is used for hash-based encoding and collision detection.
        """
        hash_value = 0
        for char in text:
            hash_value = (hash_value * 31 + ord(char)) % mod
        return hash_value

    def label_encode(self, text):
        """Encode text using sklearn's LabelEncoder.
        This method is used for label encoding and collision detection.
        """
        encoder = LabelEncoder()
        unique_chars = sorted(set(text)) # Ensure consistent mapping
        encoder.fit(unique_chars)
        encoded = encoder.transform(list(text))
        return int(''.join(map(str, encoded))) # Return encoded value as a concatenated number

encodingAnalyzer = EncodingAnalyzer()
```



Projects

Titanic data Analysis

a data analyses about the titanic ship. extracting information about the titanic ship passenger analysing there social status and families relating it to there survival rates.

Technologies Used

- python (pandas, numpy, matplotlib, seaborn)
- kaggle(titanic dataset)



Achievements



yoel dawod

has successfully passed all requirements for

Microsoft Certified: Azure AI Fundamentals

Credential ID: CE19021471B91C8E

Certification number: 8F7A8D-4F543A

Earned on: June 20, 2024



✓ Online Verifiable

Demonstrated foundational knowledge of AI concepts and Azure services, including machine learning, natural language processing, computer vision, and responsible AI practices.

Testimonials

khadija mahmoud



Amazing job, Yoeel. Keep it up!

Let's Work Together



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