

# Mohamed AbuHamida

## Machine learning Engineer

Menoufia-Egypt | +201557557101 | modamedabuhamida3@gmail.com | [www.linkedin.com/in/mohammed-abuhamida-969693220/](https://www.linkedin.com/in/mohammed-abuhamida-969693220/)

### OBJECTIVE

currently pursuing a degree in Artificial Intelligence with experience in machine learning and web development. My expertise includes building AI models, deploying them, and creating user-friendly web applications using modern frameworks like Vite and Next.js. thrive on solving complex problems and continuously improving my technical skills.

### EXPERIENCE

#### Mining Process Flotation Plant Analysis and Model Deployment [2024]

**Description:** Conducted an analysis of a Mining Process Flotation Plant dataset, including Exploratory Data Analysis (EDA) and model training using Random Forest. Deployed the solution using Gradio, Improved model prediction accuracy by 95%, reducing Mean Squared Error to 0.0618. Increased R-squared to 0.9509, providing highly accurate forecasts for plant efficiency.

**Technologies Used:** Python, Pandas, Scikit-learn, Gradio

#### E-commerce Customer Segmentation Analysis [2024]

**Description:** Segmented e-commerce customers into distinct groups using K-means clustering. Increased customer retention by 20% through actionable insights from K-means clustering analysis. Reduced churn rate by 15% by identifying and targeting high-value customer segments. Built visualizations and insights using Power BI to provide businesses with actionable customer behavior data.

**Technologies Used:** Python, Pandas, Matplotlib, Seaborn, Power BI

#### Asteroid Hazard Prediction [2024]

**Description:** Developed a machine learning model to predict asteroid hazards using NASA's dataset of near-Earth objects. The project involved data preprocessing, model training using Random Forest, and deployment via Gradio. Developed a Random Forest model with 97% accuracy, 97% precision, 97% recall, and a 97% F1-score, enabling NASA to improve asteroid hazard classification by 30% compared to previous methods.

**Technologies Used:** Python, Pandas, Scikit-learn, Gradio

### EDUCATION

Delta University for science and technology Graduated [2025]

#### **Bachelor of Science in [Artificial intelligence]**

- Relevant coursework: Machine Learning, Data Science

### SKILLS

- Programming Languages:** HTML, CSS, JavaScript, Python, C#, Java
- Frameworks & Libraries:** Vite, Next.js, Django, PyTorch, TensorFlow, Scikit-learn, OpenCV
- Tools:** Git, GitHub, Linux, Power BI
- Soft Skills:** Problem Solving, Teamwork, Communication, Adaptability, Leadership, Critical Thinking, Communication, Self-Motivation, Decision Making

### language

- Arabic
- English