Abdelrahman Mostafa

Mechatronics TA @HTI | AI Researcher

Email: <u>abdelrahmanmost.33@gmail.com</u> Phone: +20 1013933185

Professional Summary

I am an experienced AI researcher and teaching assistant with a strong background in Mechatronics and AI technologies. My expertise lies in designing, implementing, and delivering AI and machine learning training programs. I am passionate about leveraging advanced tools and frameworks to bridge the gap between AI theory and practical applications. Seeking a role in AI research and development where I can share knowledge, conduct impactful research and contribute to advancing AI education.

Professional Experience

Higher Technological Institute — Teaching Assistant

October 2022 - Present

- Delivered technical courses in Mechanical, Electrical, and Computer Engineering.
- Conducted workshops and hands-on labs, integrating AI and machine learning tools.
- Guided students in research and AI-related projects, focusing on neural networks and computer vision-based systems.

RobotechEGYPT — Trainee

August 2020 - November 2020

- Worked with robotics frameworks, sensors, and actuators, emphasizing control systems.
- Explored AI integration in robotics through project-based training.

Egypt Air — **Mechatronics Engineer**

April 2019 - October 2019

- Gained experience in aircraft maintenance, focusing on control systems and predictive analytics.
- Learned applications of AI in fault detection and system diagnostics.

Education

Master's Degree in Mechatronics, Zagazig University

September 2022 - Present

- GPA: 3.63 / 4

- Research point focus: Machine Learning and Neural Networks for Mechanical engineering applications.

Bachelor's Degree in Mechatronics, Zagazig University

September 2016 - June 2021

- GPA: 3.54/4

- Graduated with excellent grade on SCARA Robot project, an articulated robotic arm with 5 degrees of freedom.

Skills

- <u>AI Training and Prompt Engineering</u>: Designing and delivering AI training programs, effective prompt creation for AI tools.
- **Machine Learning**: Expertise in supervised, unsupervised, and reinforcement learning models.
- **Programming:** Python (TensorFlow, PyTorch, NumPy, Pandas), MATLAB, Simulink.
- **Data Science:** Data preprocessing, visualization (Matplotlib, Seaborn), and statistical analysis.
- Robotics and Automation: Sensor integration, actuators, and robotics frameworks.
- <u>Tools:</u> Jupyter Notebook, Colab, Microsoft Excel, Microsoft Word.
- **Soft Skills:** Teaching, technical writing, and project planning.

Certifications

- Machine Learning and Data Science Certification IBM
- Self-Driving Cars Nanodegree Udacity
- Training Certification Egypt Air

Languages

- Arabic (Native)
- English (Professional)
- French (Basic)