

Abdalla Rashed

Machine Learning Engineer

Python Developer specializing in **Machine Learning & Computer Vision** applications, with a background in Electrical Engineering. I possess high analytical and programming skills and seek to grow my experience in AI research & development.







Experience

- APR 2023 **Project Engineer**
Esterline Project Management Services, Lockheed Martin CISS (Contractor)
- Research & Development for an automated Foreign Object Debris (FOD) detection system for aircraft engine bays.
 - Workshops & mentorship support.
 - Technology strategy consulting.
- SEP 2022 **Artificial Intelligence Intern**
Lockheed Martin CISS
- Research & Development for an AI aircraft inspection program.
 - Showcasing project progress, results, and future strategies to executives & VIP guests.
- MAR 2021 **Electrical Engineering Intern**
Abu Dhabi University
- Research for social-distance monitoring, vehicles detection, lane detection & behavior cloning projects.
 - Self-Driving Course Material: Preparing lab manuals and project kits
- JUN 2020

Education

- SEP 2020 **B.Sc. In Electrical Engineering**
Abu Dhabi University
- SEP 2016
- Summa Cum Laude with 3.99/4.00 CGPA.

Personal Info

-  [Sharjah, UAE](#)  **Golden Visa**
-  r.abdalla.1195@gmail.com  [+971 52 124 0215](tel:+971521240215)
-  [r-evaar.github.io/profile](https://github.com/r-evaar)  github.com/r-evaar

Software and Programming

- | | |
|---|---|
| Python PyTorch, Hugging Face, NumPy, Pandas, Flask, OpenCV, Tkinter, Selenium | MATLAB Deep Learning & Data Acquisition Toolboxes, App Designer |
| Version Control Git, GitHub, & GitLab | Web HTML, CSS, Bootstrap |
| | C++ STL |

Publications

- MAR 2023 <https://doi.org/10.1016/j.engappai.2023.106143>

Skills

Applied ML Experience

- **Vision Transformers**
- **CNN** Classification & Regression
- **Object Detection**
- **Motion Detection & Tracking**
- **Anomaly Detection & Self-Supervised Learning**
- **Continual Learning**

Additional ML Knowledge

- **RNNs**, Transformers for NLP Tasks, Multimodal Learning / Alignment

Agile Software Development Life Cycle

3D Design & Printing

- Autodesk Inventor

Embedded Systems Programming

- Arduino & Raspberry Pi
- Nvidia Jetson SOM

ROS Basics

Electrical Circuits Design

Professional Writing & Presentation in LaTeX & MS Office

Other Projects

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|---------------------------|---|
| APR 2021 OCT 2020 | AI-Powered Autonomous Robot for Pit and Flue Wall Health Condition Assessment <i>Emirates Global Aluminium</i> <ul style="list-style-type: none">• Worked on building an AI-Powered drone for monitoring the operating conditions of aluminum anode baking furnace.• Developed a framework for pit detection, visualization, & post-processing.• Worked on an UWB indoor positioning system. |
| JUL 2020 SEP 2019 | Smart Shopping Cart for People of Determination <i>Abu Dhabi University</i> <ul style="list-style-type: none">• Developed a smart shopping solution to assist wheelchair users.• Design involved: robotic arm for gripping items, automatic barcode detection and scanning system, cart items detection & validation, and a shopping user interface. |
| MAR 2020 OCT 2019 | Autonomous Robot for Temperature Abnormalities Detection <i>Emirates Global Aluminium</i> <ul style="list-style-type: none">• Worked on an AI robot for detecting temperature abnormalities at aluminum smelters.• Developed an autonomous driving framework for the robot.• Provided and designed a solution for electromagnetic field interference, enabling the robot to properly operate at site. |

Awards

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| APR 2021 | First Place in 3rd EGA Industrial Robotics Competition <i>Emirates Global Aluminium</i> |
| JUN 2020 | First Place in 3rd Annual ECE Design Project Competition - Judges' Choice <i>Abu Dhabi University</i> |
| MAR 2020 | First Place in 2nd EGA Industrial Robotics Competition <i>Emirates Global Aluminium</i> |
| 2017-2020 | Certificate of Excellence, Certificate of Honor Student <i>Abu Dhabi University</i> |

Other Activities

Dubai Maker Fair Exhibition
26th-28th Feb 2019

ADDA – Hackathon
17th-19th Nov 2019

Languages

Arabic, Native Speaker
English, Fluent