# ElSayed Abdelkader ElShikh

# **Robotics Software Engineer**

Dedicated roboticist with a passion for technology. From hobby to lifelong commitment, I design, craft, and program robots. Comprehensive grasp of robotics, hands-on experience. Excited about Artificial Intelligence and Classical Robotics intersection. Eager learner, constantly pushing innovation boundaries.



Cairo, Egypt



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github.com/EISayedEISheikh



upwork.com/freelancers/sayedelsheikh



elsayedelsheikh.github.io/Portfolio



linkedin.com/in/elsayed-elsheikh

#### **EDUCATION**

# **BSc Mechanical Engineering, Power Department**

Tanta University, Faculty of Engineering 09/2015 – 06/2021

#### Graduation Project %

Excellent (199/200)

Led the design, manufacturing and programming of an Autonomous Mobile Robot tailored for sanitization using Ultra-Violet rays which funded by ASRT.

## WORK EXPERIENCE

### **Robotics Software Engineer**

Upwork

Top Rated, Freelancer

02/2022 - Present

Achievements

- Contributed to a range of robotics projects worldwide.
- Designed and programmed mobile robots for agricultural applications, such as automating lawn mowing and plant watering robots.
- Executed diverse deep learning tasks, including Image Classification, Time-Series Forecasting, Sentiment Analysis, and object detection, utilizing PyTorch and Tensorboard with CNN, RNN, LSTM, and SSD.
- Deployed different models on AI edge devices with streamlit and flask for user-friendly web applications.

### **Robotics Software Engineer**

Promwad

Remote

05/2022 - 10/2022

Achievements, video demo %, Project Report %

- Developed visual inspection ROS node using YOLOv5.
- Implemented SMACH's finite-state machine container for seamless sensors & actuators coordination.

## **Heavy Equipment Intern**

United Company 08/2021 - 12/2021

ElSalam, Egypt

Achievements

- Troubleshot various machines powered by Hydraulics.
- Fueled by a passion for programming, chose to evolve into a Robotics Engineer for a dynamic intersection of design and technology exploration.

## **Heavy Equipment Intern**

Irfan Allam Company 07/2020 – 10/2020

Sharjah, UAE

Achievements

 Disassembled wheel loaders, bulldozers and Collaborated with a diverse team, gaining insights into different cultures and backgrounds.

### **Heavy Equipment Intern**

AlJasoor Company 07/2019 – 10/2019

Ajman, UAE

Achievements

 Gained hands-on experience with hydraulic systems beyond circuit diagrams.

#### Oil and Gas Intern

Petrogulf Misr 07/2018 - 09/2018

Hurghada, Egypt

Achievements

 Gained comprehensive insights & Witnessed drilling operations and examined hydraulic systems behind it.

# **SKILLS**



### **PROJECTS**

- Drone Flocking Algorithm (Academic Research)
- 3D Point Cloud Registration %
- Indoor 4WD Mobile Robot Navigation
- Mobile Robot Navigation with Reinforcement Learning
- Further projects on GitHub & Portfolio

#### VOLUNTEERING

- Headed the Robotics Division (MEC<sup>®</sup>), leading, inspiring team members, and shared passion for robotics.
- Conducted sessions on classical robotics, control theory, and workshops on ROS, Arduino, and C++ programming.