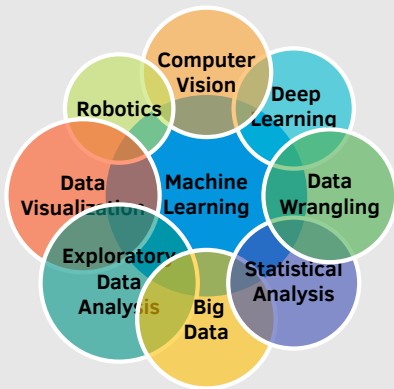# Ahmed Mohamed

Software Engineer
Computer Vision

- 09/19/1997   Egyptian
- Cairo, Eg   +20 1027916478
- ahmedosama9777@gmail.com
- ahmedosama9777
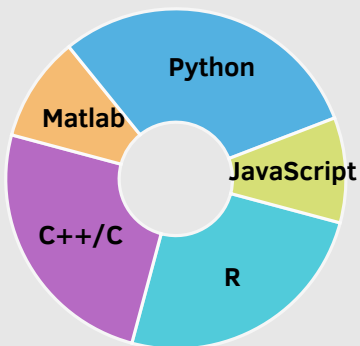- /in/ahmedosama9777

Skills

Overview

Tools

🧪	TensorFlow PyTorch Keras NLTK Pandas Numpy
🗄	MySql MongoDB
📈	Matplotlib Seaborn ggplot Plotly Tableau LaTeX
⚙	git, ROS, Hadoop, Spark

Programming

Interests

📖 🎵 🖥 🚲 🎮 🐧
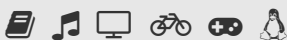
☰ Experience

2019 - 2020 Electrical Technical Director   **Cairo Uni Racing Team**
- Along side a team, worked on designing and implementing the state-of-the-art software architecture of a self driving vehicle.
- Implemented a deep neural network for object detection.
- Implemented ResNet to detect key points in cone batches.
- Implemented simultaneous localization and mapping algorithms for the vehicle.
- Implemented path planning algorithms.
- Integrated all software modules through a ROS sekeleton.
- Simulated and visulized the full functioning driverless vehicle.
- Managed a team of 30 members to design and simulate the electrical system of a formula style electric vehicle.
- **tools**: Python, PyTorch, ROS, rviz, git.

2018 - 2019 Embedded Systems Team Head   **Cairo Uni Racing Team**
- Along side a team, designed, simulated and manufactured an formula style electric vehicle.
- Using ARM controllers, built an embedded system of several electronic control units connected through CAN protocol.
- Managed a team of seven members to work together under a V-model of development.
- Gained deep and intensive knowledge and practical experience in embedded systems and automotives.
- **tools**: C++, C, git, ARM controllers, CAN protocol.

2018   Software Developer Intern   **Egyptian Ambulance Organization**
- Development of Automated Surgery Waiting List for Egyptian Public Hospitals.
- Development of Administrative Work Bench for Hospital and Healthcare Ministry of Egypt.
- Developed a Website to Record and Track Medical Records for Egyptian Pilgrims in Government Pilgrimage Programs.
- System is Submitted for Production and Deployment in September 26th, 2018.
- The internship was a four months one, from May to September 2018.
- **tools**: Laravel, HTML, CSS, PHP, MySQL

🎓 Education

2015 - 2020 Bachelor of Science   **Cairo University, Faculty of Engineering**
Major in Computer Engineering, GPA: 3.0

🗋 Projects

2019 - ...   AutoRace   **GitHub Repo**
- Implementation of a state-of-the-art Robotics Software pipeline of an autonomous racing vehicle including Perception from monocular and stereo cameras, Localization, Mapping, and Motion Control.

2020   Go Board Game   **GitHub Repo**
- AI agent for Go board game based on Deepmind's AlphaGozero.