Mahmoud Gamal
MACHINE LEARNING ENGINEER

Hadayek El-Maadi, Cairo-willing to relocate

☎ (+20)1098255987 | ✉ mg1488@fayoum.edu.eg | 🔗 mgama1 | Military status: Exempted

Education

Fayoum University
BSc in Mechatronics Engineering. *Spring 2023*
- Grade:3.0 (Very good)

skills

Knowledge: Machine learning | Deep Learning | Image processing | Data visualization | Object oriented programming| Mechatronic systems

Technologies and tools: Python | Bash | MySQL | Scikit-learn | Seaborn | LaTeX| Git | TensorFlow | Pandas | openCV | MATLAB/SIMULINK

Languages: Arabic (Native) and English (Fluent)

Projects

OGallery :

- Developed an open-source gallery app for Linux with advanced search capabilities, image viewing, and editing functionalities.
- Trained a MobileNet network classifier to categorize images in the setup directories, improving image organization and search.
- Implemented robust searching features using Levenshtein distance for misspelling correction and autocomplete suggestions, enhancing user experience.
- Optimized image loading by implementing a cache mechanism, resulting in faster image loading times and improved overall performance, with specifications aligned with freedesktop.org standards.

ADAS perception module(Graduation project) :

- Implemented an image processing pipeline for lane detection using OpenCV.
- Collected road data for instance segmentation, developed code to convert it to the appropriate YOLO label format, and fine-tuned YOLOv5 on the custom dataset. Additionally, performed object detection by collecting cars and traffic signs data,fine-tuning YOLOv5 on the custom dataset, and successfully deployed it on Raspberry Pi.

Heart disease classifier : Binary classification for the presence of heart disease.

- Conducted data exploratory analysis and data visualization using pandas and Seaborn.
- Trained models such as logistic regression, decision tree, and random forest with scikit-learn and hyperparameter tuning using grid search.

Extracurricular Activity

IEEE FSB
ROBOTICS TEAM HEAD *Nov 2020- June 2021*
- Founded the team, developed the curriculum and Tutored Robotics fundamentals and Arduino MCU

Fab lab Fayoum
MACHINE OPERATION VOLUNTEER *Nov 2019-May 2021*
- Provided technical support for the visitors

Related courses

Machine Learning Data Lifecycle in Production Introduction to machine learning in production	Neural Networks and Deep Learning Improving Deep Neural Networks	Convolutional Neural Networks(audit) ST121:probability and statistics (audit) Stanford CS229: Machine Learning (audit)