Mahmoud Gamal

Machine Learning Engineer

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Education

Fayoum University

BSc in Mechatronics, Robotics and Automation Engineering. *class of 2023*

- Very good

skills

Knowledge: Machine learning | Deep Learning | Data visualization | Object oriented programming| Embedded systems | Control systems

Technologies and tools: Python | C | scikit-learn | Seaborn | LaTeX| Git | TensorFlow | Pandas | |MATLAB/SIMULINK| AVR microcontroller

Languages: Arabic (Native) and English (Fluent)

Projects

Heart disease classifier : binary classification for the presence of heart disease . performed data exploratory analysis and data visualization using pandas and Seaborn. model training using logistic regression, decision tree, and random forest with sci-kit learn. Hyper parameter tuning using grid search.

pyctrl : developing open source python library for modern control, including functions such as: conversion between State Space and Transfer Function, solutions of state space systems, step response, pole placement, checking for stability, controllability, observability

Manipulator : Developed a 5 DOF manipulator, modeled the kinematic chain and calculated the inverse kinematics using Denavit–Hartenberg parameters, coded the GUI using TKinter, experimenting controlling methods.

Security lock : Security lock using ATmega16 interfaced with Hitachi LCD and keypad

Work Experience

Siemens energy-EGTA

Trainee *August 2020 - September 2020*

- Summer Virtual training on Electrical Engineering (Renewable Energy, Automation, Power Plants

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*

- Technical support for the visitors

Related courses

- **Introduction to TensorFlow for AI, ML, and DL**
- **Introduction to machine learning in production**
- **Neural Networks and Deep Learning**
- **Improving Deep Neural Networks**
- **Convolutional Neural Networks**
- Python for Data Science and Machine Learning Boot-camp(audit)
- MIT 6.034 (audit)