Mohamed Abdelkarim

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in Mohamed Seyam ⏻ mohamed-seyam

Education 🎓

📰 BSc Senior Student | **Biomedical** Engineering Department | **Cairo University** with a cumulative grade **(90%)**

📅 2018 – present   📍 Cairo, Egypt

Training ⚙

👨‍🔧 Clinical and Maintenance Internship | El Monira Hospital

🔳 **Key words**: Clinical Engineering, Repair cycle, Maintenance contracts, X-ray, MRI, CT, Ventilator, Anathesia, Incubators, hemodialysis.
💼 **Supervisors :** Eng.Amany Mohi

Projects ⚙

💻 Image Mixer | GUI application | ⏻

🔳 **Key words**: Python, PyQt5, Qtdesigner, OOP, FFT, FT, Scipy.
💼 **supervisors :** Dr.Tamer Ahmed, Eng.Christina

💻 Sound Equalizer | GUI application | ⏻

🔳 **Key words**: PyQt5, pyqtgraph, FPDF, numpy, scipy, librosa, matplot.
💼 **supervisors :** Dr.Tamer Ahmed, Eng.Christina

💻 Biomedical signal Viewer. | GUI application | ⏻

🔳 **Key words**: Python, PyQt5, pyqtgraph, FPDF, Scipy, Numpy, matplot
💼 **supervisors :** Dr.Tamer Ahmed, Eng.Christina

💻 Traffic Light System | ⏻

🔳 **Key words**: Assembly, MCU(8051), proteus
💼 **supervisors :** Dr.Ahmed Ehab, Eng.Mohamed Mostafa

🗄 Radiology Information System | Web project | ⏻

🔳 **Key words**: Flask, SQLALchemy, Postgres, HTML, CSS, bootstrap, JQuery, Flask-WTF
💼 **supervisors :** Mr.Aymen Anwar, DR.Ahmed Hesham

💻 PGM Lossless image compression.| ⏻

🔳 **Key words**: C++, CMake, Qt, Date Structures, Algorithms, Data Compression, Huffman
💼 **supervisors :** Eng.Asem alaa, DR.Ahmed Hesham

💻 Fourier and Fast Fourier Transform.| Console App | ⏻

🔳 **Key words**: Python, PyQt5, FFT, FT, C++
💼 **supervisors :** Dr.Tamer Ahmed, Eng.Christina

🔗 Analyze gene expression data for cancer type LUSC | ⏻

🔳 **Key words**: Python, Numpy, Pandas, Matplotlib, Scipy
💼 **supervisors :** DR.Ibrahim Yousef

Skills 💡

🖳 **Programming Language:**

Python: (Numpy, OpenCV, Pandas, Matplotlib, Flask, Django, Pyqt)
C++: (STL, Qt, OpenGl, GLUT), **C**

🔳 **Web Development:**

FrontEnd (HTML, CSS, JS, Bootstrap, JQuery),   **BackEnd** (Django, Flask)

🗄 **Database:** MySQL, PostgreSQL, SQLite

☰ **Digital Typesetting:** LaTeX, Markdown.

🔧 **Development EcoSystem:**

OS (🪟 Windows, 🐧 Unix), **C++ compilers** (GCC), **Others** (git ,GitHub ⏻ , MATLAB, Octave, Proteus).

Extra-Curricular Activity 🗠

Finalist At Engineering Research Track 🔗

📅 Aug 2020   📍 Nile University

10th UGRF Special Edition:Egyptian Junior Researcher Competition Nation-Wide Competition hosted by Nile University and NU-Research.We were Competing against 500+ projects (1600+ student) with project title **Smart Shunt for Treatment of Hydrocephalus**[⏻]
🔳 **Keywords**: hydrocephalus, wireless powering, wireless communication, bio compatible materials, radio frequency

Siemens MRI, CT Molecular Imaging Workshop. 🔗

📅 Mar 2019   📍 Cairo University
Fundamentals of MRI and CT physics and working principle.

One For All || The Second BEAT Conference

📅 Mar 2019   📍 Cairo University
Biomedical Engineering different careers road maps, sessions about the newest technologies and techniques in the market.

Technical C++ instructor | Beat

Preparing material for the course introduces to engineering students from Cairo, Ain Shams and Helwan Universities.