

Mohamed Seyam

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🌐 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

📖 **Keywords:** Clinical Engineering, Repair cycle, Maintenance contracts, X-ray, MRI, CT, Ventilator, Anesthesia, Incubators, hemodialysis.

👤 **Supervisors :** Eng.Amany Mohi

Projects



🎵 **Audio Fingerprinting & Recognition** | GUI application | 🌐

📖 **Keywords:** Python, PyQt5, Numpy, Scipy, Matplotlib, Logging, MySQL, Combinatorial Hashing, Kernels, Spectrogram.

🖼️ **Image Mixer** | GUI application | 🌐

📖 **Keywords:** Python, PyQt5, QtDesigner, OOP, FFT, FT, Scipy, Logging

🔊 **Sound Equalizer** | GUI application | 🌐

📖 **Keywords:** PyQt5, pyqtgraph, FPDF, numpy, scipy, librosa, matplotlib.

🖥️ **Biomedical signal Viewer.** | GUI application | 🌐

📖 **Keywords:** Python, PyQt5, pyqtgraph, FPDF, Scipy, Numpy, matplotlib

🚦 **Traffic Light System** | 🌐

📖 **Keywords:** Assembly, MCU(8051), proteus

🌐 **Radiology Information System** | Web project | 🌐

📖 **Keywords:** Flask, SQLAlchemy, Postgres, HTML, CSS, bootstrap, JQuery, Flask-WTF

✂️ **PGM Lossless image compression.** | 🌐

📖 **Keywords:** C++, CMake, Qt, Data Structures, Algorithms, Data Compression, Huffman

🖥️ **Fourier and Fast Fourier Transform.** | Console App | 🌐

📖 **Keywords:** Python, PyQt5, FFT, FT, C++

☁️ **Analyze gene expression data for cancer type LUSC** | 🌐

📖 **Keywords:** Python, Numpy, Pandas, Matplotlib, Scipy

☁️ **Object Animation & Texturing** | Medical Visualization | 🌐

📖 **Keywords:** Object Animation, Texture Mapping, Lighting & Coloring, Loading DICOM Images, Surface Rendering, Ray Casting.

Skills



📚 **Programming Language:**

Python: (Numpy, OpenCV, Pandas, Matplotlib, Flask, Django, PyQt)

C++: (STL, Qt, OpenGL, GLUT).

MCU 8051:(C, Assembly).

🌐 **Web Development:**

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

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

🖨️ **Digital Typesetting:** L^AT_EX, Markdown.

🔑 **Development EcoSystem:**

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

Extra-Curricular Activity



🏆 **Egyptian Junior Researcher Competition.**

📅 Aug 2020

📍 Nile University

📄 **Poster | Summary**

🏆 **Finalist Team** at Engineering and Applied Science Research Track. It is a Nation wide Competition hosted by **Nile University** and **NU-Research**.

📖 **Keywords:** Hydrocephalus, Wireless Powering, Wireless Communication, Bio-compatible Materials, RF.

🐍 **Python for Everybody**

📅 90 Hr

📍 Michigan University

📖 **Keywords:** Data structures, Networks, APIs Interfacing, SQLite.

🏆 **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.