

BASEL MOKHTAR

Education

- Graduate of Faculty of Engineering, **Port-Said University**
- Accumulated Grade: **Very Good With Honors "80.4%"** , Ranked "9"
- Port-Said University, **Master of Electrical Engineering**, October 2025 (Expected).
- Finished My Graduation Project "**Demand Side Energy Management Using PLC**" with excellent grade.

Projects "A complete portfolio of my projects is available on GitHub via the link provided in my biography."

DAY-AHEAD TECHNO-ECONOMIC MARKET SCHEDULING FOR VIRTUAL POWER PLANTS

In Progress

- This study optimizes Virtual Power Plants (VPPs) by integrating Electric Vehicles and Battery Energy Storage for revenue and grid support.
- A day-ahead model uses advanced AI to reduce uncertainties in scheduling based on market prices and renewables.
- It considers factors like EV behavior and battery health for optimal power flow through the VPP's energy management system.
- Overall, the research shows the benefits of coordinating DERs within VPPs for techno-economic advantages.

MEPCON 2023 – Conference Paper – Mansoura, Egypt.

December 2023

- Published a paper in International Middle East Power Systems Conference (**MEPCON 2023**)
- **Publisher:** IEEE
- Titled "**Novel Short Electric Load Forecasting Approach Using a Multivariate Transformer Neural Network and CEEMDAN**"
- **DOI:** 10.1109/MEPCON58725.2023.10462386.

WEB SCRAPPING DATA FROM GOOGLE WIKIPEDIA TO ANALYZE COMPANIES REVENUES. – Personal Project.

December 2019

- **Task:** Scrapes financial data, specifically company revenue information, from Google Wikipedia.
- **Method:** Leverages Python and the BeautifulSoup library to achieve this.
- **Process:**
 - Makes HTTP requests to fetch the website's content.
 - Parses the retrieved HTML structure to identify relevant data.
 - Extracts the company revenue data.
 - Transforms the scraped data into a clean format, likely suitable for further analysis or reporting purposes.

Work Experience

ELECTRICAL INSTRUCTOR – ElSewedy Technical Academy – Portsaid, EG.

Sep 2023 - Current

- Under the direction of academic staff, provides skilled assistance in the preparation of teaching and research aids.
- Takes responsibility for the day-to-day operation of specified workshops, and/or laboratories, and/or equipment, ensuring effective and efficient resource usage is maintained.
- Provides skilled assistance, technical guidance and training to students, academic and research staff, advising on relevant techniques and required safety precautions.

GENERAL ORGANIZATION FOR IMPORT AND EXPORT CONTROL – Inspection Engineer – Portsaid, EG.

December 2021 - Sep 2023

- Performs full range of Inspection on industrial products and equipment and to report on the quality of products.
- Made quality decisions (accepted or rejected) based on provided Standards and Regulations.
- Reviews Products documents for accuracy and compliance.
- Maintained and organized all records, documentation, and other files associated with inspections.

December 2019 - Sep 2021

- Support and direct Catenary engineering and drafting staff.
- Knowledge of Catenary wire properties, insulators and miscellaneous hardware.
- Perform periodic inspections on the catenary overhead line to ensure the stability of service.

Courses and Trainings

- Classic Control at HA Consulting Company.
- PLC Basic at HA Consulting Company.
- PLC Advanced at HA Consulting Company.
- Electrical Distribution at Right Way Consulting Company.
- **Data Analysis:** SQL, Python, Tableau, Excel, and Power BI.
- **Data Science:** Machine Learning and Artificial Intelligence.

Skills

Python

Libraries: pandas, matplotlib, numpy, BeautifulSoup2, matplotlib, seaborn, etc.

SQL

Software: SQL Server Management Studio, Microsoft Access

Excel

Tools: Pivot Table, Pivot Chart, VLOOKUP, HLOOKUP, VBA

Power BI

Tools: DAX, API, Power Query

C++

Structured Programming, Object Oriented Programming

Tableau

Data Preparation, Data Visualization

Language Skills

- **English**
 - **Speaking:** Very Good
 - **Writing:** Excellent
 - **Understanding:** Excellent