# **Kerolos Emad Rasmy**

Beni Suef

# **OBJECTIVE**

Highly motivated Electrical Engineering undergraduate with a strong passion for the power industry seeking to leverage my academic foundation and leadership skills to gain valuable experience in electricity generation, transmission systems, Control systems and sustainable and renewable energy. Eager to contribute to a team environment and learn from experienced professionals.

#### **EDUCATION**

# BENI-SUEF UNIVERSITY, FACULTY OF ENGINEERING

October 2020 - July 2025

Dani Cuat univers

Beni-Suef university, faculty of Engineering , Electrical power Department Overall Rating: B+

#### **ACTIVITIES**

#### ST-GEORGE THEATRE

2019 - NOW

LEADER OF THE TEAM

It is an Act of charity that I do in my country. I am the sound engineering of the theatre and the leader of the team whom works their

SCOUT 2020 - NOW

**TRAINER** 

It is an Act of charity, I train a youth scout team in my town and teach them discipline, respect for deadlines and seriousness in work

**COP28** 21/10/2023 - 26/10/2023

Country representative

it was a very exciting opportunity for me as the event started by discussing many important topics like "what is the impact of cutting trees on climate "and the electrical vehicles

#### Rally Beni Suef society

2023 - 2025

PLANNING AND TRAINING

Beyond engineering, I dedicate my time to empowering young minds by volunteering as a youth scout leader. Through fun activities and interactive learning, I instill valuable values like discipline, respect for deadlines, and a strong work ethic. Witnessing their growth and positive development is incredibly rewarding.

IEEE Beni Suef 2023 - 2025

Embedded Arduino

It was a very exciting experience we first studied an introduction about Arduino and its software and how to connect them by hardware and comparison between the Arduino and other platforms then we made a simulation on Proteus and the for and while loops and the advanced Arduino

#### **CERTIFICATIONS**

IELTS	2019
Youth and Climate change (UNICEF)	2022
IELTS	2025
EDUVATE	2024

#### **COURSES AND INTERNSHIPS**

#### Distribution diploma

2022

Completed a specialized Distribution diploma, focusing on electrical power systems in building environments. I gained proficiency in AutoCAD and Dialux Evo for designing and simulating electrical layouts, and honed skills in Excel for managing project data and calculations.

# • Training at (Al-Wajh Al-Qibli Electricity Production Company)

2023

Gained comprehensive understanding of the electricity generation process, from initial power plant operations to high-voltage transmission for distribution.

# • Training at (South Helwan Electricity Production Company)

2023

Enhanced understanding of power plant equipment like the transformer and switch gear and switch yard and how it works and maintenance.

#### Training at (Elkorymat station Electricity Production Company)

2023

Through firsthand observation and participation in training programs at ELKORYMAT, developed a strong understanding of the interplay between steam and gas turbine operations in the electricity generation process.

#### • Introduction to Artificial Intelligence and Applications Training at

ZEWAIL CITY 2023

Zewail City's AI Introduction program explored the history and core concepts of AI, while equipping me with Python coding skills and project management tools to turn theory into practical applications.

# <u>First Arab Virtual Forum and Training Camp of</u> Sustainability & Renewable Energy Technologies - Tamkeen

2023

equipped me with a deep understanding of solar and wind energy. This intensive program explored both the theoretical and practical aspects, including maintenance procedures, necessary calculations, and the seamless integration of these technologies into hybrid systems.

#### SMC Company for solar panels

2024

SMC's solar panel training provided a comprehensive understanding of on-grid and off-grid systems, pump applications, inverter functionality, solar cell assembly, and both parallel and series panel connections for optimal voltage output

#### GIZA CABLES gc3

2024

Giza Cable's training program offered a comprehensive understanding of cable production, from raw materials to finished products. We explored cable families (O.H.T.L., LV, control, fire resistant, MV, HV, EHV, and UGC), mastering the processes of armoring, screening, and sheathing for diverse applications.

#### Schneider Electric Global Student Experience.

2024

Completed the Supply Chain Learning Track at Schneider Electric, gaining comprehensive knowledge in key areas such as manufacturing processes, industrialization strategies, logistics management, and supply chain transformations. The course covered best practices and innovative approaches in optimizing supply chain efficiency and sustainability.

#### Middle Egypt Electricity Distribution Company

2024

Interned at Middle Egypt Electricity Distribution Company, gaining hands-on experience with cables, transformers, medium and low transmission lines, electrical distribution panels, and overhead transmission lines. Additionally, I explored new and renewable energy sources, energy efficiency improvements, and the use of capacitors and reclosers for maintaining electricity quality.

### • HA Group Automation and Control Course. 22/8/2024 to 25/9/2024

Gained knowledge in Classic Control principles, including control system design and analysis. Developed skills in PLC Basic Programming, working with ladder logic, timers, and counters. Hands-on experience with Motor Drive systems, including configuration, operation, and troubleshooting. Applied practical knowledge through lab sessions and real-world case studies.

#### • ITI FULL STACK WEB DEVELOPMENT BY PYTHON 6/8/2025 to 11/9/2025

Gained comprehensive knowledge in Full Stack Web Development using Python and the Django framework. Developed essential skills in Back-End technologies (Python, Django ORM, REST APIs) and Front-End essentials (HTML5, CSS3, JavaScript, Responsive Design). Successfully applied Git/GitHub for version control and implemented deployment strategies on cloud platforms.

# Smart Solar-Powered Irrigation System using AI and IoT

- Designed and implemented an integrated system combining Artificial Intelligence (AI) and Internet of Things (IoT) technologies to monitor and improve agricultural efficiency.
- Developed a plant health monitoring model using image processing and machine learning techniques (K-Nearest Neighbors classifier, SSIM-based comparison, and dataset finetuning) to detect early signs of unhealthy crops.
- Built a real-time IoT platform using Raspberry Pi, camera modules, and Telegram bot integration for instant notifications and alerts.
- Incorporated weather forecasting APIs to provide predictions on rainfall, temperature, and humidity for smarter irrigation decisions.
- Implemented data storage and mobile application integration through Firebase and Flutter, enabling farmers to remotely track crop health, growth progress, and environmental conditions.
- Powered the system with solar energy, making it sustainable, cost-effective, and suitable for remote agricultural areas.

#### COMPUTER SKILLS

Microsoft Word

Microsoft Excel

 Microsoft Power Point AutoCAD

Revit PVSYS

CSS

• ETAP MATLAB  Dialux Evo Proteus

Homer Factory IO

Python

visual Studio

• HTML

• TIA PORTAL

JAVA SCRIPT

DJANGO

# **LANGUAGES**

• English (B2)

 Arabic (Native Speaker)

#### INTERPERSONAL SKILLS

- Leadership
- Time Management
- Risk Management
- Team Player Attitude
- Passion For Learning
- Self-Discipline

- Communication
- Negotiation skills
- problem solving
- work ethics
- Growth mindset