**Ahmed Farahat Esmail**

**Undergraduate Electrical Engineer**

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# Summary

An aspiring Electrical Engineer currently pursuing an undergraduate degree with a keen interest in the field of home automation. With a solid foundation in electrical principles and a passion for innovative technologies, dedicated to exploring the intersection of electrical engineering and automated systems.

# Professional Experience

* **Intern - Giza Cable Industries GC3**  Feb-Mar 2024
* Gained a deep understanding of LV, MV, and HV cables, including OHTL and UGC.
* **Marketing Intern – Corridor Talks** Jul-Aug 2023
* learn about new fields and Utilize the knowledge gained in various areas such as Personal Branding, Sales, Marketing, and Business Development.
* **Intern - Egyptian Electricity Transmission Company (EETC)** Jul-Aug 2023
* Passed through the lifecycle of Electricity Transmission through 1 weeks.
* **Intern – Siemens Energy** Aug-Sep 2022
* Gained experience in SIEMENS LOGO \_8Kit with the implementation of some small automation projects.
* Had a close view of different electrical circuits used there.

# Volunteering Experience

* **Smart Home Co Lead at IEEE-ZSB PES SOCIETY** Oct 2023/Present
* Responsible for leading 20+ members.
* Responsible for overseeing the entire technical committee activities (6) as well as strategic planning, decision making, and ensuring that all aspects run smoothly.
* **Competition Team Member at IEEE-ZSB PES SOCIETY** Feb/Sep 2023
* Designed and configured electrical part of our projects (Electrolyzer and Fuel Cell).
* Worked on 2 projects, Smart Toll Station and Green Hydrogen Reactor.
* **Powertrain Team Lead at Z Fast Racing Team**
* Design BMS system using Simulink MATLAB simulation for Electric Vehicle at the EVER Competition.

# Education

* **Bachelor of Electrical Power Engineering** 2020-2025 (Expected)

Cumulative Grade (Up to third level): Excellent – 86% (Above 3)

Smart cities, Siemens, Internship Program, Responsibility, Excellence, Practical work experience, Academic education, talents, Recruitment strategy, Employer branding, Talent Pipeline, Digital, Mentorship, Growth mindset, July and August commitment, Engineering (Power/Electrical), Graduating in 2024 or 2025, Smart Home, Smart Infrastructure, smart energy distribution systems, smart grid technologies, electric cars infrastructure, smart buildings and smart city technologies.

# Awards and Honors

* 3rd place in Smart Government Hackathon 2023.
* NASA Space Apps Cairo 2021&2022 participant.

# Languages

* Arabic – Native Language
* English – (Reading & Writing) Excellent | (Listening & Speaking) Very Good

# Courses

* **KNX Basic Course – Futurasmus KNX Group** Jan/Aug 2024
* Arguments of KNX System.
* System Topology and Devices.
* KNX Installation.
* KNX Telegram.
* ETS Planning.
* **Model Based Design – OS-Academy** Apr/May 2023
* Focuses on creating mathematical models.
* Models generate system code.
* Create a Model for Battery Management System (BMS).
* **Certified Simulink Professional - MathWorks** Jan/Feb 2022
* Learn main levels and apply on Simulink MATLAB.
* Design power electronics for motor controlling .

# Technical and Personal Skills

| * AutoCAD | * Microsoft Office (Word, Excel and PowerPoint) |
| --- | --- |
| * ETS software | * Adobe Photoshop |
| * Simulink MATLAB * DIALux Evo | * Adobe Premiere Pro |

# Personal Skills

* Leadership as the leader for 70+ members.
* Orchestrated and delivered 15+ high-impact presentations at global tech conferences.
* Team-worker with 10+ experience in different teams.
* Multitasking as the leader of IEEE PES ZSC.
* Decision making and strategic planning.