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Address
New Cairo - Fifth settlement - South lotus - Area no. 11

LANGUAGES

English	Very Good
Arabic	Native Speaker

SKILLS

Inventor & Solidworks

Autocad

Ansys

Matlab & Simulink

Python

C & C++

Machine learning

AI

EES

Proteus

INTERESTS

Travel

Football

Music

Mohamed Gamal Allam

Mechanical Engineer

EXPERIENCES

Teaching assistant and researcher , Arab academy for science, technology and maritime transport

Cairo, heliopolis , Jan 2023 - Present

EDUCATION

Master's degree in sustainable green hydrogen and ammonia production, Arab academy for science, technology and maritime transport

Cairo, Heliopolis , Feb 2023 - Present

My master's thesis focused on the development of an intelligent, integrated system for the sustainable production of green hydrogen and ammonia. The system was based on a solar-driven energy framework incorporating a Spectral Beam Splitting Concentrated Photovoltaic Thermal (SBS-CPVT) unit, thermal energy storage (TES), an Organic Rankine Cycle (ORC), a Proton Exchange Membrane (PEM) electrolyzer, and an Air Separation Unit (ASU). I conducted a comprehensive techno-economic analysis to evaluate the system's feasibility, including capital and operational cost assessment, net present value (NPV), and payback period. Additionally, I applied artificial intelligence tools for performance prediction and optimization of key operational parameters. The research demonstrated the potential of intelligent renewable-based systems for efficient, off-grid green hydrogen and ammonia production, contributing to the advancement of clean energy technologies.

Bachelor of Mechatronics Engineering, Arab academy for science, technology and maritime transport

Cairo, Heliopolis , Sep 2016 - Jul 2021

Graduated from Arab academy for science, technology and maritime transport Mechatronics Engineering Department with an average Grade 3.83 equivalent to Excellent (High Honor).

Graduation Project

Sep 2020 - Jul 2021

• DESIGN AND IMPLEMENTATION OF LOWER LIMB EXOSKELETON: The objective of the project is design and implementation of a complete lower limb exoskeleton equipped with a control unit through which the subject can choose several motion modes which include standing and walking in general. The project aims to support people with special needs and helps them blend with the society without the need for a permanent companion.
• Grade: A+

ADDITIONAL INFO

• Matlab training course at VANDERBILT University.
• Python training course at the University of MICHIGAN.
• Machine learning course at STANFORD university.