MOHAMMAD SHRAIF

COMMUNICATIONS & ELECTRONICS ENGINEERING EXPERT

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Lebanese | D.O.B 04/05/1993 | Douris, Lebanon

Results-driven engineering professional with a robust background in teaching, research, and product validation. With a strong foundation in electronics, embedded systems, communication systems, and renewable energy solutions, I am committed to applying my expertise in innovative engineering practices, fostering academic excellence, and driving industry advancements. Seeking a challenging position where I can contribute to cutting-edge projects, mentor aspiring engineers, and further develop my skills in electronics and sustainable technologies.

PROFESSIONAL EXPERIENCE

LEBANESE INTERNATIONAL UNIVERSITY – Beirut, Lebanon

Engineering Instructor Oct 2021 – Present

- Deliver comprehensive lectures and practical sessions on topics in Computer and Communication Engineering (CCE) and Electrical and Electronics Engineering (EEE).
- Implement course materials, including syllabi, assignments, exams, and lab exercises to align with the latest industry standards and technological advancements.
- Guide and mentor senior engineering students through the design, development, and implementation phases of capstone projects.
- Conduct laboratory sessions, instructing students on the proper use of lab equipment, measurement techniques, and safety protocols.
- Develop lab experiments to complement theoretical knowledge with practical hands-on experience in electronics, circuits, and systems design.
- Provide hands-on assistance in diagnosing and resolving issues in electronic circuits, communication systems, and electrical equipment.
- Organize and lead Artificial Intelligence (AI) initiatives, workshops, and events to foster student interest and expertise in AI technologies.

SILICON CEDARS, SYNOPSYS – Beirut, Lebanon

R&D / Product Validation Intern Apr 2022 – Jun 2022

- Contribute to the research and development of new products, ensuring alignment with customer requirements and market trends.
- Collaborated with senior engineers and product managers to test and validate new prototypes and concepts.
- Conducted experiments, gather data, and analyze results to improve product designs and features.
- Supported the preparation of product validation reports, highlighting test results and potential areas for improvement.
- Performed comparative testing and benchmarking against competitor products to ensure market competitiveness.
- Assisted in the development and maintenance of product documentation, including specifications, user guides, and test procedures.
- Participated in the troubleshooting of issues during product testing and suggest solutions for design and process improvements.
- Maintained a strong understanding of industry standards and best practices for product validation and development.

C.E.R.D LEBANON, MINISTRY OF HIGHER EDUCATION IN LEBANON – Beirut, Lebanon

R&D Engineer Jun 2021 – Jun 2022

- Designed and developed a 250 kWp Photovoltaic (PV) system, ensuring optimal performance and integration with existing infrastructure.
- Conducted feasibility studies, including energy analysis and system sizing, to determine cost-effective and efficient PV solutions.
- Collaborated with cross-functional teams to ensure compliance with industry standards and regulations.
- Led the prototyping, testing, and optimization of photovoltaic modules for improved energy output and longevity.
- Managed technical documentation, including design specifications, performance reports, and system manuals.
- Conducted research on emerging technologies to improve system efficiency and integrate advanced solutions into future designs.

AL MABARRAT ASSOCIATION – Beirut, Lebanon

Engineering Trainer Oct 2017 – Jun 2020

- Delivered training sessions on S.T.E.M. (Science, Technology, Engineering, and Mathematics) curriculum to students of various age groups.
- Developed and implemented lesson plans and activities to foster students' understanding of engineering concepts and principles.
- Organized and led teams in various Robotics Competitions, including F.T.C. and N.A.S.R.
- Provided hands-on coaching for students to build, program, and operate robots in a competitive environment.
- Taught Android application development using M.I.T. App Inventor, enabling students to create functional mobile apps.
- Designed and conducted workshops to enhance student skills in coding, robotics, and problem-solving.
- Monitored and assessed student progress, providing feedback and support to improve performance and knowledge retention.
- Fostered a collaborative and engaging learning environment for students to explore engineering challenges creatively.

BINAA TECHNICAL SCHOOL, THE LEBANESE ORGANIZATION OF STUDIES AND TRAINING – Baalbeck-Douris, Lebanon

Photovoltaic Plant Designer and Installer Jan 2018

- Designed and developed customized photovoltaic (solar power) systems for educational institutions to meet energy efficiency goals.
- Conducted site assessments and feasibility studies to evaluate potential for solar panel installations.
- Managed the installation and integration of solar systems, ensuring compliance with safety regulations and technical standards.
- Performed system testing and troubleshooting to ensure optimal performance and energy production.
- Ensured all photovoltaic plant systems were fully operational post-installation and supported long-term sustainability.

EDUCATION

BEIRUT ARAB UNIVERSITY – Beirut, Lebanon
Master of Engineering – RF and Microwave Systems 2018 – 2019

LEBANESE INTERNATIONAL UNIVERSITY – Beirut, Lebanon
Master of Science in Electronics Engineering 2015 – 2017

LEBANESE INTERNATIONAL UNIVERSITY – Beqaa, Lebanon
Bachelor of Science in Electronics Engineering 2012 – 2015

PUBLICATIONS

- J. Al Asmar, M. Shraif, H. El Khoury and J. Monhem, "Economic Performance of a 250kW Solar PV System: Application to Lebanon," 2022 4th IEEE Middle East and North Africa Communications Conference (MENACOMM), 2022, pp. 100-105, doi: 10.1109/MENACOMM57252.2022.9998192.
- Abraham Serhane, Mohammad Shraif, Hassan Chehadi, Adnan Harb, and Ali Mohsen, "Optimizing Solar Systems Using Device NET", IEEE - ICM 2017, 10 – 13 December 2017, Beirut, Lebanon.
- Ibrahim Serhan, Mohammad Shraif, Hassan Chehadi, “Optimizing Solar Systems Using Industrial PLC Based System”, LAAS’17 – 7 April 2017, Beirut, Lebanon

CERTIFICATIONS

JABER CONSULTING 2024
AI for Educators – 12-hour Training Program

JABER CONSULTING 2024
AI Bootcamp – 30-hour Training Program

LINKEDIN LEARNING 2024
Programming Concepts for Python

LINKEDIN LEARNING 2024
Programming Foundations: Beyond the Fundamentals

LINKEDIN LEARNING 2024
Programming Foundations: Fundamentals

LINKEDIN LEARNING 2023
Computer Science Principles: Programming

DATAQUEST 2022
Introduction to Python Programming for Data Science

NVIDIA: DEEP LEARNING INSTITUE (DLI) 2020
Building Transformer-based Natural Language Processing Applications

NVIDIA: DEEP LEARNING INSTITUE (DLI) 2020
Fundamentals of Deep Learning

COMPETENCIES

- Languages: Arabic – Native, English – Full Professional Proficiency.
- Software: Proteus, Microchip Studio, OrCAD PsPICE, Multisim, LTSpice, ModelSim, Cadence Virtuoso, MATLAB, ANSYS HFSS, PVSyst, LabVIEW NXG, AutoCAD 2D & 3D, V.S.Code, MS Office, Outlook, Research & Navigation.
- Programming Languages: Assembly, Ladder Logic, Arduino, AppInventor, Python, VHDL.
- Core Skills: Electronics Engineering, Communication Systems, Renewable Energy, AI and Robotics Design, Circuit Design, Troubleshooting, System Validation, Product Development, Testing, Technical Documentation, Research & Development, Feasibility Studies, Teaching & Mentoring, Project Management, Problem Solving, Communication, Collaboration, Adaptability.

References Available upon Request