

Mohammad Hamdan

Contact Information

Address:
Amman, Jordan

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Education

University of Southampton, UK

1/2016 : 12/2019

PhD in Electrical Engineering.

PhD Thesis: Analysis of Thermo-Mechanical Stresses in Joints and Cables.

Impact of renewable technologies on High voltage insulation, R&D project on power cable stresses, HV cable sizing and transmission capacity optimization, utilizing numerical simulation (FEA) and theoretical analytics (thermal, electrical and mechanical).

Publications:

- M. A. Hamdan, J. A. Pilgrim and P. L. Lewin, "The Temperature Dependence of Insulation Mechanical Properties and its Effect on Interface Pressure in Cable Joints," IEEE 2nd International Conference on Dielectrics (ICD), 2018.
- M. A. Hamdan, J. A. Pilgrim and P. L. Lewin, "Effect of Short Circuit Currents on Thermo-mechanical Properties of Insulated Cables," IEEE Conference on Electrical Insulation and Dielectric Phenomena (CEIDP), 2018.
- M. A. Hamdan, J. A. Pilgrim and P. L. Lewin, "Effect of Sheath Plastic Deformation on Electric Field in Three Core Submarine Cables," IEEE Conference on Electrical Insulation and Dielectric Phenomena (CEIDP), 2018.
- M. A. Hamdan, J. A. Pilgrim and P. L. Lewin, "Thermo-Mechanical Analysis of Solid Interfaces in HVAC Cable Joints," IEEE Transactions on Dielectrics and Electrical Insulation, 2019.
- M. A. Hamdan, J. A. Pilgrim and P. L. Lewin, "Analysis of Thermo-Mechanical Stress in Three Core Submarine Power Cables," IEEE Transactions on Dielectrics and Electrical Insulation, 2019.

University of Southampton, UK

09/2013 : 09/2014

Masters of Energy Sustainability with Electrical Power Engineering

Relevant Courses: Power Systems Analysis, Transmission Distribution, Advanced Photovoltaics, Energy Resources and Usage, High Voltage Insulation, Renewable Energy Technologies.

Master thesis: Modelling and control LCL Hybrid Voltage Source Converter based HVDC Technologies for Grid Connection of Renewable Systems: A Simulation Based Approach.

Jordan University of Science and Technology

09/2005 : 07/2010

Bachelor of Electrical Power Engineering

Relevant Courses: Power Electronics, Electrical Machines, Control Theory, Power Systems Analysis, Conventional Generation.

Graduation Project: Power System Stabilizer – investigation of power system stability enhancement (PSSs).

Professional
Experience

Drives and Control Sales and Marketing Engineer–ABB 01/2015:12/2015

Responsibilities:

- Translate the needs of the customer in the relevant offerings based on ABB's product, system, and service portfolio.
- Understanding the underlying needs of the customer and identifying new business possibilities.
- Charting out and monitoring sales proposals and tendering (e.g. quantity, margin, product/system), and following up statistics concerning sales proposals.
- Having the responsibility to ensure that market information, such as the assessment of business potential within select segments, offerings to customers, price levels, is updated and documented in written form in the provided system.
- Contributing to the identification and development of new and/or potential customers

Customer Support Engineer - Cisco Systems

01/2012 : 09/2013

Responsibilities:

- Provide second/third level technical support for Unified Computing, B and C Series (both hardware and software) to Cisco customers, partners, account teams, and other TAC engineers via phone/email/fax consultation to independently troubleshoot & debug product problems.
- Apply analytical skills and technical knowledge to solve product and network problems of moderate to high complexity.
- Submit complete and correct Defect reports in area of expertise.
- Act as a technical expert and provide support on a world-wide basis.
- Provide technology/product training and intellectual property material as required.

Development Project Engineer - Silvertch M.E FZCO 01/2011 :1/2012

Responsibilities:

- Responsible for the client's needs during the pre-design phases of their projects; overseeing all design issues and coordinating with estimating and project management departments on all design-build projects.
- Network with customers, designers, engineers, in-house estimating department, subcontractors and suppliers.
- Visit and observe ongoing projects to further develop personal knowledge and offer technical assistance to the team.
- Participate in the weekly project development team meetings to discuss project status, project resources, and other needs
- Study product design, customer requirements performance standards, and then determine project specifications.
- Provide technical support to Customers, Business Development Managers and Manufacturing.

Training

- ABB AC and DC Drives.

- ABB Solar Pump Drives.
- ABB UPS.
- Cisco UCS (Unified Computing System): Data center virtualization.
- **SilverTech Internal Training:** Panel Hardware, Electrical wiring, Installation Design and Construction, UPSs systems, Batteries, Rectifiers DC power supplies.
- WinCC: Siemens HMI.
- PLC Based Safety Related Systems – ICS Triplex AADVANCE System Configuration and Programming.
- Offshore Survival Course (GTSC Facilities – Abu Dhabi)
- HMI mapping.
- SCADA system.
- **Engineering Training:** Jordan Electric Power Company (JEPCO).

Software Skills

- COMSOL
- MATLAB
- ERACS.
- PowerWorld.
- HMI Applications WinCC.
- AutoCad.
- CCNA.
- MCITP Windows server 2008.

Languages

- Native Arabic speaker.
- Fluent spoken and written English.