

CURRICULUM VITAE

Sameer Al-Dahidi, Ph.D., CMRP

Department of Mechanical and Maintenance Engineering (MECH)
School of Applied Technical Sciences (SATS)
German Jordanian University (GJU)
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SUMMARY

Sameer Al-Dahidi received the **B.Sc. degree** (with honors – 1st rank) in Electrical and Computer Engineering from The Hashemite University (Jordan) in 2008, the **M.Sc. degree** (very good – 1st rank) in Nuclear Energy (Operations Specialty) from Ecole Centrale Paris and Université Paris-Sud 11 (France) in 2012, and the **Ph.D. degree** (with honors) in Energy and Nuclear Science and Technology from Politecnico di Milano (Italy) in 2016. From 2008 to 2010, Dr. Al-Dahidi worked as an Electrical & Instruments Engineer at CCIC and Kharafi National on Oil & Gas and petrochemical mega projects in Kuwait and the UAE.

Dr. Al-Dahidi is currently the **Head of the Mechanical and Maintenance Engineering Department (Full Professor)** at the School of Applied Technical Sciences, German Jordanian University, Amman, Jordan. His research interests include the **development of advanced machine learning models and optimization techniques to address complex industrial challenges including applications in renewable energy systems and thermal processes**. Focus areas include performance analysis, system optimization, energy efficiency and sustainability, techno-economic evaluation, Reliability, Availability, Maintainability, and Safety (RAMS) analysis, and Prognostics and Health Management (PHM).

Dr. Al-Dahidi is an outstanding professor, teaching bachelor and master-level engineering courses both full-time and part-time locally (e.g., Al Hussein Technical University - HTU) and internationally (e.g., The Technical University of Applied Sciences Würzburg-Schweinfurt - THWS), with **exceptional evaluations** from students (>92%). He has supervised and co-supervised >50 Bachelor, Master, and Ph.D. theses and dissertations both locally and globally. Dr. Al-Dahidi is the author and co-author of >110 papers on high-quality international journals and proceedings of international conferences, a referee of >20, a guest editor of 6 special issues at high-quality international journals, and a permanent editor of 2 journals. As of **July 2025**, Dr. Al-Dahidi's h-index was **29** in Google Scholar, **25** in Scopus, and **23** in ISI Web of Science.

Dr. Al-Dahidi served as the **Program Coordinator** and **Quality Assurance Manager** for the EDU-SYRIA EU-funded educational and humanitarian project (valued at **€37.6 million**) from June 2021 to July 2025.



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PERSONAL INFORMATION

Date and Place of Birth : Nov 12th, 1986, Kuwait
Nationality : Jordanian
Marital Status : Married (two children)
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sameer.dahidi@yahoo.com



EDUCATION

January 2013 – March 2016

Ph.D. in Energy and Nuclear Science and Technology, *Politecnico di Milano, Italy*

- Politecnico di Milano [QS Rankings 2025/2026](#): **1st** (Italy), **7th** (Europe), **21rd** (world) in the subject of Engineering and Technology, and **98th** (world), entering the world's top **6-8%** of excellent universities.
- Thesis “*Development of Data-Driven Methods for Prognostics and Health Management under Variable Operational Conditions in Industrial Equipment*”.
- Marie Curie Ph.D. Fellowship within the European Project “*Innovation through Human Factors in risk analysis and management*” (InnHF, www.innhf.eu).
- Ph.D. with **Honors** (the highest possible grade).

September 2010 – September 2012

M.Sc. in Nuclear Energy, Operations, *École Centrale Paris and Université Paris-Sud XI, France*

- GPA of 16/20 (Very Good – Rank 1 out of 12).
- Master Scholarship from French Government, 2010-2012.

September 2004 – June 2008

B.Sc. in Electrical and Computer Engineering, *The Hashemite University, Jordan*

- GPA of 3.92/4.0 (Excellent – Rank 1 out of 121).
- Rank 2nd out of 535 graduates from all Jordanian universities in the University Efficiency Examination, held by the Ministry of Higher Education and Scientific Research, in the Electrical Engineering specialization, Jordan.

September 2003 – August 2004

General Secondary Education Certificate (Scientific Stream), *Alshamila Secondary School, Jordan*

- GPA of 92.6/100 (Excellent).

UNIVERSITY EXPERIENCE

May 2025 – Present

Full Professor, *Mechanical and Maintenance Engineering Department, School of Applied Technical Sciences, German Jordanian University, Amman, Jordan.*

February 2021 – July 2025 (4 years and 5 months)

Associate Professor, *Mechanical and Maintenance Engineering Department, School of Applied Technical Sciences, German Jordanian University, Amman, Jordan.*

February 2018 – January 2021 (3 years)

Assistant Professor, *Mechanical and Maintenance Engineering Department, School of Applied Technical Sciences, German Jordanian University, Amman, Jordan.*

October 2017 – January 2018 (4 months)

Part-Time Lecturer, *Mechanical Engineering Department, Faculty of Engineering, The Hashemite University, Zarqa, Jordan.*

June 2016 – May 2017 (1 year)

Research Associate, Postdoctoral Research Fellow, *Energy Department, Politecnico di Milano, Milan, Italy.*
Research Topic 1: Development of Data-Driven Methods for the Prediction of Electricity Production by Renewable Energy Sources (Co-operation contract between Edison R&D and Politecnico di Milano).
Research Topic 2: Development of Methods for the Analysis of Long Term, High Dimensional Data Streams and their Use for Detection of Abnormal Patterns in Industrial Equipment of Electricity Production Plants (Co-operation contract between EDF R&D and Politecnico di Milano).

January 2013 – March 2016 (3 years and 3 months)

Ph.D. Candidate and Early Stage Researcher at InnHF EU Project (Project ID 289837), *Energy Department, Politecnico di Milano, Milan, Italy*
Research Topic: Development of Data-Driven Methods for Prognostics and Health Management under Variable Operational Conditions in Industrial Equipment

January 2014/2015 – April 2014/2015 (6 months)

Visiting Ph.D. Candidate (Secondment Period – Research Collaboration), *Chair System Science and the Energy Challenge, Fondation EDF, CentraleSupélec, Laboratory of Industrial Engineering, Paris, France*
Research Topic: Processing Condition Monitoring Data for Diagnosis and Prognosis of Components in a Fleet of Electricity Production Plants (Co-operation between EDF R&D and Politecnico di Milano)

January 2014 – April 2014 (4 months)

Researcher at HEMIS EU Project (Project reference FP7-ICT-314609, www.hemis-eu.org), *Energy Department, Politecnico di Milano, Milan, Italy*
Research Topic: The Development of a Data-Driven Model for the Diagnosis of IGBT Failures.

June 2008 – October 2008 (4 months)

Lab Supervisor, *Electrical and Computer Engineering Department, The Hashemite University, Zarqa, Jordan.*

ADMINISTRATIVE POSITIONS

February 2025 – Present

Head of Department, *Mechanical and Maintenance Engineering Department, School of Applied Technical Sciences, German Jordanian University, Amman, Jordan.*

June 2021 – July 2025 (4 years)

Program Coordinator and Quality Assurance Manager, *EDU-SYRIA EU-Funded Project (37.6 million Euros) (<https://edu-syria.eu/>), German Jordanian University, Amman, Jordan.*

February 2018 – July 2024 (6 and a half year)

Exchange Coordinator, *Mechanical and Maintenance Engineering Department, School of Applied Technical Sciences, German Jordanian University, Amman, Jordan.*

September 2022 – August 2023 (1 year)

Representative of the Head of Department, *Mechanical and Maintenance Engineering Department, School of Applied Technical Sciences, German Jordanian University, Amman, Jordan.*

September 2021 – August 2022 (1 year)

Exchange Coordinator, *Mechatronics Engineering Department, School of Applied Technical Sciences, German Jordanian University, Amman, Jordan.*

DEPARTMENT, SCHOOL, AND UNIVERSITY SERVICES

August 2025

Committee Member, *University-Level Promotion Committee.* The objective is to review promotion application from Associate to Full Professor at GJU.

July 2025 – August 2025

Committee Member, *Joint Research Proposal Evaluation Committee (GJU, JUST, HTU)*. The objective is to support inter-university collaboration in evaluating joint research proposals between GJU, JUST, and HTU.

July 2025 – August 2025

Committee Member, *Academic Integrity Review Committee*. The objective is to participate in a formal academic review regarding concerns raised in one course.

March 2025 – Present

Committee Member, *AI Committee for SATS*. The objective is to integrate AI into the teaching, research, and operational activities of SATS.

September 2024 – Present

Committee Member, *University Council Committee*. The objective is to participate in University Council meetings, represent the School, provide School concerns at meetings, and approve MOMs.

September 2024 – Present

Committee Member, *Disciplinary Committee at the School of Applied Technical Sciences of the German Jordanian University*. The objective is to promote academic integrity and ensure students' adherence to university regulations by addressing violations fairly and impartially.

October 2022 – Present

Committee Member, *Dual Study Track at the School of Applied Technical Sciences of the German Jordanian University*. The objective is to evaluate the current dual study track at the Department.

October 2022 – July 2024 (2 years)

Committee Member, *German 4th Year at the School of Applied Technical Sciences of the German Jordanian University*. The objective was to handle all aspects related to the 4th German year of the three majors of the School.

May 2024 – June 2024 (1 month)

Committee Member, *Germany Year Courses in the Mechatronics Engineering Bachelor's Program*. The objective was to review and update the Germany Year courses in the Bachelor's program in Mechatronics.

May 2024 – June 2024 (1 month)

Committee Member, *Evaluation of PhD Scholarship Applications at the Mechanical and Maintenance Engineering Department*. The objective was to assess and review applications to select the best candidates for a PhD scholarship opportunity.

January 2024 – February 2024 (1 month)

Committee Member, *Evaluation of Teaching and Research Assistant Appointment Applications at the Mechanical and Maintenance Engineering Department*. The objective was to assess and review applications received to select the best candidates for a Teaching and Research Assistance position at the Department.

August 2023 – September 2023 (1 month)

Committee Member, *Evaluation of Faculty Transfer Application at the Mechanical and Maintenance Engineering Department*. The objective was to assess and review the transfer application of a faculty member at the Department.

October 2022 – August 2023 (1 year)

Committee Member, *School Council at the School of Applied Technical Sciences of the German Jordanian University*. The objective was to represent the Department and to discuss the whole aspects of the School.

October 2022 – August 2023 (1 year)

Committee Member, *Media and Marketing for the Mechanical and Maintenance Engineering Department and School of Applied Technical Sciences at the German Jordanian University*. The objective was to improve the publicity of Department as well as IE and ME majors of the School.

June 2022 – December 2022 (7 months)

Committee Coordinator, *Performance Evaluation of the Active Gas Network at the German Jordanian University*. The objective was to inspect the active gas network of the University and later to study the recommendations provided by the National Gas Company concerning the inspections carried out and the ultimate recommendations offered for how to improve the performance of the active gas network of the university while ensuring a high level of safety.

May 2022 – June 2022 (1 month)

Committee Member, *Risk Assessment at the German Jordanian University*. The objective was to highlight potential risks at the University and establish a guideline for assessing them by the relevant parties at the University.

March 2022 – March 2022 (1 month)

Committee Member, *Examiner Committee Member for GJU students who applied for ERASMUS+ Scholarship of their German Year (4th Year of their B.Sc. program) of the whole Schools at the German Jordanian University*. The objective was to evaluate/examine the students who applied for the ERASMUS+ Scholarship opportunity of their German year across the whole schools of the University.

September 2019 – September 2020 (1 year)

Committee Member, *University Council Committee*. The objective was to participate in University Council meetings, represent the School, provide School concerns at meetings, and approve MOMs.

September 2018 – June 2020 (1 year and 10 months)

Committee Member, *SATS Open Day School Committee*. The objective was to plan and organize activities (Students Poster Competition of their Graduation Projects and Labs Demo) for the School' Open Day.

April 2019 – January 2020 (10 months)

Committee Member, *Teaching and Research Assistant Interview and Selection Department Committee*. The objective was to study submitted applications (91), conduct several interviews (more than 30%), and finally nominate candidates for the Department's Teaching and Research Assistant Positions.

August 2019 – October 2019 (3 months)

Committee Coordinator, *Smart Grid Lab Tender Committee*. The objective was to study all offers and select winners (the first Smart Grid Lab in Jordan and the largest ever SATS tender regarding allocated budget as part of ERASMUS+ Program (Project No. 585648-EPP-1-2017-1-UK-EPPKA2-CBHE-JP)).

February 2018 – August 2019 (2.5 year)

Committee Member, *Life-long (Continual) Learning School Committee*. The objective was to initiate, discuss, and implement the following tracks for the development of the life-long (continual) learning within the School: 1) Establish a connection between SATS/GJU and ACI by offering several industrial training courses to be taught by SATS faculty professors targeting personnel working in various Jordanian industries, 2) Support the GJU's Office for Industrial Links (OIL) in organizing a periodical one-week intense training course/workshop for GJU graduates, company representatives, and professors (Adapt2job), and 3) Offer various training courses for SATS/GJU faculty members in up-to-date hot-topics that might be beneficial for their research/educational fields (Continual Educational Courses).

February 2018 – August 2018 (7 months)

Committee Member, *Development & Research Creativity School Committee*. The objective was to initiate and discuss establishing an Industry 4.0 Center to facilitate research at the School and write a proposal with a quotation from FESTO (an automation company) submitted to the Deanship of Scientific Research for approval.

TEACHING EXPERIENCE

- Teaching (Assistant/Associate Professor) of several graduate-level (M.Sc.) courses in the School of Applied Technical Sciences at the Industrial Engineering Department, **German Jordanian University**, Amman, Jordan, *September 2019 – Present*:
 1. *Research Methods* (Coordinator)
 2. *Reliability and Maintenance Management* (Coordinator)
- Teaching (Assistant/Associate Professor) of several undergraduate-level (B.Sc.) courses in the School of Applied Technical Sciences at the Mechanical and Maintenance Engineering Department, **German Jordanian University**, Amman, Jordan, *February 2018 – Present*:
 1. *Computer-Aided Math for Mechanical Engineering Students* (Coordinator)
 2. *Reliability and Quality Control* (Coordinator)
 3. *Management of Maintenance Systems* (Coordinator)
 4. *Spare Parts and Storage Management* (Coordinator)
 5. *Special Topics in Maintenance Engineering* (Coordinator)
 6. *Special Topics I for Mechanical and Maintenance Engineering* (Coordinator)
 7. *Dual Study Practical Courses*
 8. *Electrical Machines and Control LAB*
 9. *Electrical Machines LAB*
 10. *Automatic Control Systems LAB*
 11. *Statics*
 12. *Workshop*
- Teaching (Part-time Lecturer – Teaching two complete units (Pearson)) of two undergraduate-level (B.Sc.) courses in the School of Engineering Technology, Energy Engineering Department, **Al Hussein Technical University (HTU)**, Amman, **Jordan** (48 teaching hours):
 1. *Maintenance Engineering* [July-August 2023]
 2. *Maintenance Engineering* [September 2023-January 2024]
- Teaching (Part-time Lecturer – As part of the International Teaching Week 2023 – Teaching one complete module of 6 days – 60 contact hours) of one undergraduate-level course in the Faculty of Business and Engineering, **Technical University of Applied Sciences Würzburg-Schweinfurt (THWS)**, Schweinfurt, **Germany**, *May 19th-27th 2023* (60 hours including interactive exercises, group work, etc.):
 1. *Artificial Intelligence for Condition-Based and Predictive Maintenance*
- Teaching (Part-time Lecturer – As part of the International Teaching Week 2022 – Teaching one complete module of 6 days – 60 contact hours) of one undergraduate-level course in the Faculty of Business and Engineering, **University of Applied Sciences Würzburg-Schweinfurt (FHWS)**, Schweinfurt, **Germany**, *May 13th-21st 2022* (60 hours including interactive exercises, group work, etc.):
 1. *Management of Maintenance Systems*
- Teaching (Part-time Lecturer) of several undergraduate-level courses in the Faculty of Engineering at the Mechanical Engineering Department, **The Hashemite University, Jordan**, *Fall 2017* (192 hours):
 1. *Numerical Analysis*
 2. *Thermal Science Lab I* (Coordinator).
- Teaching (Assistant) of several graduate-level courses at **Politecnico di Milano, Italy**, *2014-2017* (35 hours):
 1. *Risk, Reliability, and Safety Analysis*
 2. *Availability and Maintenance*
 3. *Computational Methods for Reliability*
 4. *Advanced Methods for RAM, Diagnostics, and Prognostics of Industrial Equipment.*
- Teaching (Assistant) of several industrial courses at **Eni Corporate University, Italy**, *2014-2016* (35 hours):

1. *Quantitative Risk Assessment*
 2. *Maintenance Engineering.*
- Teaching (Assistant) of a graduate-level course in the Master Nuclear Energy program at **École Centrale Paris, France, February 2nd and 13rd, 2015** (7 hours):
 1. *Maintenance of Nuclear Installations.*

UNDERGRADUATE & GRADUATE STUDENT ADVISING

- Co-supervisor of **TWO Ph.D.** students in their dissertations at the Energy Department, Politecnico di Milano, *June 2016 – March 2021* (Supervisors: Prof. Enrico ZIO and Prof. Piero BARALDI):
 1. **Mingjing XU** [Thesis title: Deep Learning and Reservoir Computing for Prognostics and Health Management with Missing Data and Information]
 2. **Zhe YANG** [Thesis title: Data, Text and Image Processing by Deep Learning and Extreme Learning Machine for Prognostics and Health Management]
- Supervisor¹ and Co-supervisor² of **ELEVEN M.Sc.** students in their theses:
 1. **Hamam BANI-AMER** [Thesis title: Optimizing Residential Construction Projects in Jordan: A Proactive Risk Management Approach Utilizing AHP, RII, BPRT, Fishbone Techniques, Amman, **Jordan, September 2024 - Present** (Co-supervisor: Dr. Emhaidy GHARAIBEH)¹.
 2. **Lina ALDAWADEH** [Thesis title: A Predictive Modeling Approach of Solar Photovoltaic Energy Production Across Different Climatic Zones Using Diverse Machine Learning Approaches, Freiburg, **Germany, September 2024 - Present** (Supervisor: Dr. Mohammadreza AGHEI)².
 3. **Omar HABABEH** [Thesis title: Modeling, Simulation, Experimental Evaluation, and Production Prediction of Bifacial PV Solar Panel] at the Mechanical Engineering Department, The University of Jordan, Amman, **Jordan, September 2023 – January 2025** (Supervisor: Dr. Osama AYADI)².
 4. **Dania ALSAWALMEH** [Thesis title: Intelligent Intrusion Detection System to Protect the IoT Network from the DDoS Attacks using Machine Learning] at the Computer Science Department (Enterprise Systems Engineering Program), German Jordanian University and Princess Sumaya University for Technology, Amman, **Jordan, September 2022 – August 2025** (Supervisor: Dr. Dhiah el Diehn I. ABOU-TAIR)².
 5. **Eman ABUMAHFOUZ** [Thesis title: A Hybrid Feature Engineering (Fuzzy Analytic Hierarchy Process) and Machine Learning (Artificial Neural Network) Approach for an Accurate Cost Estimation of Construction Projects] at the Industrial Engineering Department (Engineering Management Program), German Jordanian University, Amman, **Jordan, September 2021 – January 2023** (Co-supervisor: Dr. Emhaidy GHARAIBEH)¹.
 6. **Alia Mohammad AL-RAWAHNEH** [Thesis title: Performance Analysis and Prediction of a Grid-Connected Photovoltaic System] at the Mechanical Engineering Department (Renewable Energy Program), Mu'tah University, Mu'tah, **Jordan, November 2021 – January 2022** (Supervisor: Prof. Ali S. AL-DMOUR)².
 7. **Abdul-Aziz AL-SHUBBAK** [Thesis title: Performance Comparison of Machine Learning Algorithms for Solar Photovoltaic (PV) Output Prediction] at the Mechanical Engineering Department, The University of Jordan, Amman, **Jordan, September 2018 – January 2022** (Supervisor: Dr. Osama AYADI)².
 8. **Jehad ADEEB** [Thesis title: Machine Learning for Optimum Solar Power System Integration] at the Mechanical Engineering Department, The University of Jordan, Amman, **Jordan, September 2018 – January 2022** (Supervisor: Dr. Osama AYADI)².
 9. **Maria Rosaria TERMITE** [Thesis title: A Never Ending Learning Method for Fault Diagnostics in Energy Systems Operating in Evolving Environments] at the Energy Department, Politecnico di Milano, Milano **Italy, February 2018 - March 2019** (Supervisors: Prof. Enrico ZIO and Prof. Piero BARALDI)².
 10. **Miriam FRESC** [Thesis title: Forecasting by Artificial Intelligence in the Energy Industry: Feature Selection for Prediction by Artificial Neural Networks] at the Energy Department, Politecnico di Milano, Milano **Italy, February 2018 - March 2019** (Supervisors: Prof. Enrico ZIO and Prof. Piero BARALDI)².

11. **Eleonora NIGRO** [Thesis title: Ensemble of Echo State Networks for Predicting the Energy Production of Power Plants] at the Energy Department, Politecnico di Milano, Milano **Italy**, *February 2018 - March 2019* (Supervisors: Prof. Enrico ZIO and Prof. Piero BARALDI)².
- Supervisor¹ and Co-supervisor² of **THIRTY-SIX B.Sc.** students in their Graduation Projects at the Mechanical and Maintenance as well as Industrial Engineering Departments, German Jordanian University, Amman, **Jordan**, *Feb 2018 – Present*:
 1. **Shatha SHAMA'A** [Thesis title: Enhancing Power Monitoring: Integration of PDU Power Meters into the Building Management System] (1st 2024/2025 – Amazon Web Services (AWS) GmbH)¹
 2. **Reema ALRABIE** [Thesis title: Enhancing Fairness And Accuracy in Automotive Retailer Performance Assessment: A Context-Based KPI Approach] (1st 2024/2025 – Mercedes-Benz GmbH)¹
 3. **Hussam AL-MOMANI** [Thesis title: Creating Transparency in Operations: Real-Time Data Visualization in Dashboard using Siemens Insights Hub] (2nd 2023/2024 – MAHLE GmbH)¹
 4. **Tariq ALKISWANI** [Thesis title: PAM: Prognostic AI Mind Data-Driven Web App for Maintenance Decision Making] (1st 2023/2024 – GJU)¹
 5. **Salem AQAYLEH, Omer MOHAMMED, and Ahmed HAMAD** [Thesis title: Techno-Economic-Environmental Evaluation of Landfill Gas Upgrading at Al Ghabawi Septic Tank] (Summer 2022/2023 – GJU)¹
 6. **Mohammad ABUARQOB, Tala ALQAWASMI, Seif NOFAL, and Iyad QADADEH** [Thesis title: Optimizing Nike's Critical Garments Production Line through Lean Techniques to Maximize Efficiency] (Summer 2022/2023 – GJU)¹
 7. **Abdallah SALEH** [Thesis title: Designing a Drone that is Able to Enhance Its Speed and Control its Flight Direction] (2nd 2022/2023 – Ingenieurbüro Ghidaoui)¹
 8. **Firas ABU-TALIB** [Thesis title: Research & Development for Smart-Fridge use in Outdoors] (1st 2022/2023 – Livello Technologies GmbH)¹
 9. **Ahmad AL-AHDAB** [Thesis title: Optimization of Air Induction above Sail Module in Terms of Effectiveness and Manufacturing Costs] (1st 2022/2023 – Zehnder GmbH)¹
 10. **Ahmad ABDO** [Thesis title: Creation of a Development Guideline for Fuel Cell Management Systems with a Focus on Mechanical Development Topics] (1st 2022/2023 – Marquardt GmbH)¹
 11. **Emad ELSAADI** [Thesis title: Investigation of Influencing Parameters in Laser Diagnostic Analysis of Microparticles] (2nd 2021/2022 – Laboratory for Optical Diagnostic Methods and Renewable Energies (ODEE) - Darmstadt University of Applied Sciences)¹
 12. **Ammar ODEH** [Thesis title: Digital Paving Production Line Optimization] (2nd 2021/2022 – LUCEM GmbH)¹
 13. **Ali ALWALEED** [Thesis title: Hazardous Substance Management System and Substances of Concern In articles as such or in complex objects Products (SCIP) Database] (2nd 2021/2022 – Reel GmbH)¹
 14. **Anas AL SHIKH KHALIL** [Thesis title: Development of a Gas-Tight Linear Motion System for Use in Gas-Insulated Switchgear] (2nd 2020/2021 – Nuventura GmbH)¹
 15. **Ahmad EDAILY and Musab ZOU'BI** [Thesis title: Machine Learning Techniques for Solar Photovoltaic Power Production Prediction] (1st 2020/2021 – GJU)¹
 16. **Saif KASSICIEH and Ahmad ALKHOFASH** [Thesis title: An Efficient Model-based Support Vector Machine (SVM) for Solar Photovoltaic (PV) Power Production Prediction] (1st 2020/2021 – GJU)¹
 17. **Mahmoud HASAN and Majed ALSAWEAR** [Thesis title: PV Power Production Prediction using Statistics and Machine Learning Techniques] (2nd 2019/2020 – GJU)¹
 18. **Moawiah Alazzam** [Thesis title: Energy Balance optimization of a WWTP by applying other technologies] (2nd 2019/2020 – PASSAVANT Energy & Environment GmbH)¹
 19. **Nadeem MAZAHREH** [Thesis title: Failure Diagnosis of Wind Turbines using Artificial Neural Networks] (1st 2019/2020 – CWD Center for Wind Power Drives – RWTH Aachens University)¹
 20. **Salah AL-NAZER** [Thesis title: Development of Artificial Intelligence (AI)-based methods for Renewable Energy Production Prediction] (2nd 2018/2019 - GJU)¹

21. **Mahmoud ALAMERI, Orwa AZZAM and Mohammad AL-SYOOF** [Thesis title: Empirical Evidence on Maintenance Management in the Jordanian Manufacturing and Process Sector] (2nd 2018/2019 - GJU)¹
22. **Abdelwahhab ABU-HMEIDAN and Mohammad MAKAHLEH** [Thesis title: Improving the Current Maintenance Practices in Arab Aluminum Industry (ARAL) in Jordan] (1st 2018/2019 - GJU)²
23. **Laith ABUALI and Yacoub HINDIYEH** [Thesis title: Guideline for Performance Monitoring and Testing of Anwar Solar Photovoltaic Project] (1st 2018/2019 - GJU)¹
24. **Mohammad YOUSEF** [Thesis title: Dynamic Inspection plan in Aerospace industry] (2nd 2017/2018 – STTS Germany GmbH c/o Airbus Operations GmbH)¹

THESES & DISSERTATIONS EXAMINATION COMMITTEE

- External examination member of **FOUR Ph.D.** students in their dissertations:
 1. **Giovanni FLOREALE** [Dissertation title: A Framework of Trustworthy Artificial Intelligence for Condition Monitoring of Energy Systems] at the Energy Engineering Department, Politecnico di Milano, Milan, **Italy**, *October 2025* (Supervisors: Prof. Enrico ZIO & Prof. Piero BARALDI).
 2. **Shailendrasingh Bhojusingh GIRASE** [Dissertation title: Investigation on Tribological Characteristics of Alternative Brake Pad Materials with Nano Ingredients] at the Faculty of Engineering and Technology, MIT World Peace University, Pune, **India**, *August 2025* (Supervisor: Prof. Dr. Basavraj S.KOTHAVALA).
 3. **H.S. Anantha PADMANABA** [Dissertation title: Effect of Oxygenated Additives on the Performance and Emissions Characteristics of a Diesel Engine Working with Jatropa-Karanja Dual Blended Biodiesel] at the Mechanical Engineering Department, VIT-AP University, Amaravati, **India**, *June 2024* (Supervisor: Dr. Dillip Kumar MOHANTY).
 4. **Bingsen WANG** [Dissertation title: Transfer Learning and Domain Adaptation for the Deployment in Practice of Prognostics and Health Management of Industrial Components and Systems] at the Energy Department, Politecnico di Milano, Milan, **Italy**, *25th May 2023* (Supervisor: Prof. Piero BARALDI & Prof. Enrico ZIO).
 5. **Mahadev** [Dissertation title: Investigations on Development and Characterization of Aluminium-Wax Metal Foam] at the Mechanical Engineering Department, Visvesvaraya Technological University, Belagavi, **India**, *October 2022* (Supervisor: Dr. C. G. SREENIVASA).
- External examination member of **EIGHT M.Sc.** students in their theses:
 1. **Moath HAIMOUR** [Thesis title: Energy Audit Concern: Forecasting the Irradiation Level in Jordan, AI Techniques and Uncertainty Analysis] at the Civil Engineering and Infrastructure Department (Engineering Management Program), Al-Zaytoonah University of Jordan, Amman, **Jordan**, *August 2025* (Supervisor: Dr. Hesham RABAYAH, Co-Supervisor: Dr. Mohmd SARIREH).
 2. **Hamzah ZURIEGAT** [Thesis title: Enhancing the Productivity of PV Module using Cooling Method] at the Mechanical Engineering Department (Renewable Energy Program), The University of Jordan, Amman, **Jordan**, *August 2024* (Supervisor: Dr. Bashar QAWASMEH).
 3. **Hazim ALKHATIB** [Thesis title: Enhancing Vacuum Tubes Efficiency using Natural Convection of Non-Newtonian Fluid in Saturated Porous Media] at the Mechanical Engineering Department (Mechanical Engineering Program), The University of Jordan, Amman, **Jordan**, *August 2024* (Supervisor: Dr. Mohammad AL-RABAI).
 4. **Dareen AL-MAKKAWI** [Thesis title: Optimizing The Performance of a Humidification–Dehumidification Desalination System for Enhanced Efficiency and Productivity] at the Mechanical Engineering Department (Mechanical Engineering Program), The University of Jordan, Amman, **Jordan**, *August 2024* (Supervisor: Dr. Mohammad AL-RABAI).
 5. **Ola ALSHAWABKEH** [Thesis title: The Use of Smart Systems Technologies to Detect Accumulated Dirt on Solar Panels Utilizing Color Recognition - Based Techniques] at the Mechanical Engineering Department (Renewable Energy Program), The University of Jordan, Amman, **Jordan**, *May 2024* (Supervisor: Dr. Bashar QAWASMEH, Co-Supervisor: Dr. Mahdi NISIRAT).

6. **Ahmad Salameh QAQOUR** [Thesis title: Optimal Operation Control of PV-Diesel Hybrid Systems Using Machine Learning Techniques] at the Mechanical Engineering Department (Renewable Energy Program), The University of Jordan, Amman, **Jordan**, *January 2023* (Supervisor: Dr. Osama AYADI, Co-Supervisor: Dr. Mohammad AL-RABAI).
 7. **Sara Jalal ABU-DABASEH** [Thesis title: Study the role of Solar and Geothermal Energy in Enhancing Organic Rankine Cycle (ORC) Performance for Heating and Cooling Applications] at the Mechanical Engineering Department (Mechanical Engineering Program), The University of Jordan, Amman, **Jordan**, *28th December 2022* (Supervisor: Dr. Mohammad AL-RABAI).
 8. **Hamad Mohammad AL-TALAFEEH** [Thesis title: Building and Experimental Testing of a Solar Basin Distiller under Different Configurations and Operation Conditions] at the Industrial Engineering Department (Energy Management Program), The University of Jordan, Amman, **Jordan**, *27th December 2022* (Supervisor: Dr. Mohammad AL-RABAI).
- Internal examination member of **TWO M.Sc.** students in their theses:
 1. **Ahmed Mahmud Ahmed AL-SUBEIH** [Thesis title: Data-Driven Artificial Intelligence (AI) Models for Analyzing and Predicting Performance and Durations for Municipal Projects in Jordan] at the Industrial Engineering Department (Engineering Management Program), German Jordanian University, Amman, **Jordan**, *12nd August 2021* (Supervisor: Dr. Hisham ELMOAQET).
 2. **Marah Rakan Salim AL-TAL** [Thesis title: Application of Data-Driven Predictive Maintenance for a Hospital HVAC System using Machine-Learning Algorithms] at the Industrial Engineering Department (Engineering Management Program), German Jordanian University, Amman, **Jordan**, *18th May 2021* (Supervisor: Prof. Raid AL-AOMAR).
 - Internal examination member of **FORTY-FOUR B.Sc.** students in their Graduation Project theses at the Mechanical and Maintenance, Mechatronics Engineering, and Industrial Engineering Departments, German Jordanian University, Amman, **Jordan**, *Feb 2018 – Present* (Supervisors: Various):
 1. **Sami DAWAHER** [Thesis title: Design and Implementation of a Test Bench for the Simulation of PEM Fuel Cells] (July 2025 – EKPO Fuel Cell Technologies)
 2. **Abdullah ZAQOUT** [Thesis title: Interoperable Connection of Robots and Camera Systems with Machines] (July 2025 – CAMPUS SCHWARZ WALD GmbH)
 3. **Adel QAROUT** [Thesis title: Dynamic Modeling and Predictive Control of Finned Tube Heat Exchangers for Low- Temperature Drying Processes] (February 2025 – maurer-atmos)
 4. **Bilal QARAQE** [Thesis title: Technical Study and Development of New Highly Efficient Drivetrain Technology for High-Pressure Gas-Compressors with Focus on H₂] (February 2025 – Maximator®)
 5. **Bashar AL-SAYEH** [Thesis title: Innovative Redesign of a Particle Detector Unit with a Controlled Orientation in a Vacuum Chamber] (January 2025 – Facility for Antiproton and Ion Research in Europe (FAIR))
 6. **Yazan ALZGHEIBAT** [Thesis title: Surface Modification to Optimize Adhesion of Epoxy Mold Compounds in Automotive Inverters] (January 2025 – SCHAEFFLER)
 7. **Loiy MARAR** [Thesis title: Smart Home Control Hub: Automation, Monitoring, Controlling and Security] (August 2024 – GJU)
 8. **Anas JADALLA** [Thesis title: Hydrogen Generation from Pumped Hydroelectric Energy Storage Integrated with Photovoltaic System] (August 2024 – GJU)
 9. **Hamza AL DABBAS, Hakam AL QUDAH, and Hamza AL NAJJAR** [Thesis title: Design of a Hybrid Geothermal Heat Pump and Electric Air Conditioning Compressor System for Building C - GJU Campus] (August 2024 – GJU)
 10. **Baraa ALTARAWNEH** [Thesis title: Optimization of Plasma Process within Assembly and Interconnection Process Chain of Power Modules] (July 2024 – BOSCH Group)
 11. **Essam AL SALHI** [Thesis title: A Research Study about Incorporating Heat Pumps to a Gas Fired Power Plant with Renewable Energy Sourced Electricity] (June 2024 – LEIPA Group)
 12. **Abdullah QASEM, Rahsed MANSOUR, and Soud ALSALEH** [Thesis title: Validation and Accuracy of Different Smartphone Measuring Applications for Real-World Settings within the Domain of Human Factors] (August 2023 – GJU)

13. **Karam ALHROUB** [Thesis title: Electrical and Optical Characterization and Modelling of Mini Modules with Integrated Bifacial Solar Cells with Respect to the Total Irradiation Power Transmission/Absorption in Solar Air Heater Devices] (July 2023 – Fraunhofer Center for Silicon PV CSP)
14. **Baha BAWANEH, Zaid ALRABABAH, and Zaid QTAISHAT** [Thesis title: Designing, Modelling, and Simulating a Proposed Sustainable Engineering Solution to The University of Jordan Hospital Access Problem] (June 2023 - GJU)
15. **Daniel MAJROUH, Suhib AL-REMAWI, and Yousef ALDAHOUK** [Thesis title: Exploiting the Potential and Feasibility of Hybrid Photovoltaic System with Pumped Hydroelectric Energy Storage in Jordan] (June 2023 - GJU)
16. **Bashar ALSLEIHAT** [Thesis title: Engineering Design of a Feed Supply System for Carnallite Dewatering Centrifuges] (March 2023 - ERCOSPLAN Ingenieurbüro Anlagentechnik GmbH)
17. **Rami MASOUD** [Thesis title: eATS – Hardware Investigation for Power Electronics/Drive Control Units] (March 2023 - Mercedes-Benz AG)
18. **Noor Aldeen KASTIRO** [Thesis title: Machine Conformity Assessment Process for CE Marking at Gigafactory Tesla Berlin-Brandenburg] (March 2023 - Tesla)
19. **Faisal ALQARRA** [Thesis title: Design and Building Enclosure for a Security System in the Automotive Industry] (Feb 2023 - KONVOI GmbH)
20. **Bahaa' KHARABSHEH** [Thesis title: Center Console Innovation- Consolidate the new proposal for Modular Center Console] (Feb 2023 - Forvia)
21. **Salahaldeen ALBEETAR** [Thesis title: Conceptual Design and Optimization for the Provisioning of Work Aid to Reduce the Immobilization Time of Railway Vehicles in Operational Maintenance] (Feb 2023 - DB Regio AG)
22. **Mohammad JADALLAH** [Thesis title: Air-Conditioned Baby Carrier Cot] (October 2022 - GJU)
23. **Anas Hassan ALJADID** [Thesis title: A Magnetic Vortex Generator for Simultaneous Heat Transfer Enhancement and Pressure Drop Reduction in a Mini Channel by using 2% and 3% Ferrofluid (Fe₃O₄)] (October 2022 - GJU)
24. **Abdelrahman ALRAWAJFEH** [Thesis title: Vibration Response of Axially Functionally Graded Material Subjected to a Moving Load] (Feb 2022 – GJU)
25. **Marwan HAMAD** [Thesis title: Conceptual Design and Development of a Database to Ensure Quality Standards According to ISO 17025] (January 2022 – OSRAM GmbH)
26. **Omar ZUAITER** [Thesis title: The Conception, Design, and Process Evaluation of a Printing Head for the Parallel Dispensing of High Viscosity Metal Paste for the Metallization of Solar Cells] (June 2021 – HIGHLINE GmbH)
27. **Yazeed MAAYAH, Yahia ELESWED and Sabri ABWINI** [Thesis title: Energy Harvesting from Vibration] (August 2019 – GJU)
28. **Saif KAWAR and Omar ABUZEITON** [Thesis title: Design of a Smart Home in Terms of Safety, Security, and Energy Efficiency] (August 2019 – GJU)
29. **Luai SHEHAB & Sulieman HAMAWI** [Thesis title: Developing Inventory Control System for Spare Parts in Royal Jordanian] (January 2019 – Royal Jordanian)
30. **Sanad REFAIE and Mohammad W. ALZOUBI** [Thesis title: Photovoltaic Systems; Operations and Maintenance Guide] (June 2018 – GJU)
31. **Ahmad M. DABASH** [Thesis title: An Analysis of Jordan's Residential Electricity Use Intensity] (June 2018 – GJU)

NATIONAL & INTERNATIONAL COMMITTEE

- Member of the Selection Committee for the STEM Scholarship Programme for Master's Studies in Germany, DAAD Jordan, November 18, **2024**, Amman, Jordan.
- Member of the Selection Committee for the Master's Studies Scholarship Programme in Germany for Yemenis students, DAAD Jordan, September 18, **2023**, Amman, Jordan.
- Evaluation of Promotion application from Assistant Professor to Associate Professor at the *American University of Kuwait (AUK)*, March **2022**.

RESEARCH INTERESTS

My research focuses on developing advanced machine learning models and optimization techniques to address complex industrial challenges, including applications in renewable energy systems and thermal processes. My focus areas include:

- **Performance Analysis:** Evaluating and predicting system performance using data-driven models for enhanced operational efficiency.
- **System Optimization:** Developing optimization techniques to maximize efficiency and minimize costs in industrial processes.
- **Energy Efficiency and Sustainability:** Enhancing energy utilization and promoting sustainable industrial operations.
- **Techno-Economic Evaluation:** Assessing the economic feasibility and cost-effectiveness of innovative energy solutions.
- **Reliability, Availability, Maintainability, and Safety (RAMS) Analysis:** Ensuring system reliability and safety through predictive maintenance and risk assessment.
- **Prognostics and Health Management (PHM):** Predicting equipment health and remaining useful life for improved maintenance and operational reliability.

GRANTS AND FUNDED RESEARCH PROJECTS

I have led and contributed to several grants and funded research projects aligned with my areas of interest. My roles have included proposal writing, technical execution, team coordination, leadership, and collaboration with academic and industrial partners. Notable projects include:

- *Data-Driven Comprehensive Framework for Enhanced Decision-Making in Distributed Energy Systems in Jordan*, funded by the **Deanship of Scientific Research (DSR) at the German Jordanian University**, **9,600 JOD**, starting **February 1, 2025**, for a duration of **one year**.
- *Systematic Approach for the Performance Optimization of Off-Grid Solar Air Conditioning Systems in Different Climatic Zones*, funded by the **Deanship of Scientific Research (DSR) at the The University of Jordan**, **7,200 JOD**, starting **January 26, 2025**, for a duration of **one year**.
- *Techno-Economic Assessment of EV Charging at Work*, funded by the **Deanship of Scientific Research (DSR) at the The University of Jordan**, **14,710 JOD**, starting **January 1, 2024**, for a duration of **two years**.
- *Machine and Deep Learning Techniques for Various Industrial Applications*, funded by the **Deanship of Scientific Research (DSR) at the German Jordanian University**, **5,640 JOD**, starting **April 1, 2024**, for a duration of **one year**.
- *Machine Learning-Based Optimization of Tilt Angle for Solar Panels*, funded by the **Deanship of Scientific Research (DSR) at the The University of Jordan**, **3,600 JOD**, starting **September 19, 2023**, for a duration of **two years**.
- *ERASMUS+ Staff Mobility opportunity for a Training Program entitled "Fault Detection, Diagnosis and Prognosis for Critical PV Systems Components"* at the University of Cyprus, Nicosia, Cyprus, funded by the **ERASMUS+ Staff Mobility Program at the German Jordanian University**, **1,300 EUR**, starting **July 25, 2022**, for a duration of **five days**.
- *Support to Higher Education for Syrian Refugees and Vulnerable Host Youths (EDU-SYRIA IV)", NDICI-GEO-NEAR/2023/449-840(PC-26325)* funded by the **European Union (EU) under the NDICI-GEO-NEAR program**, **5,000,000 EUR**, starting **September 1, 2024**, for a duration of **four years**.

INDUSTRIAL WORK EXPERIENCE

November 2023 – April 2024 (5 months)

RAM Expert, *Frieburg Company, UAE*

Project: Conducting comprehensive RAM analysis and prediction tasks specific to Frieburg's contractual Mechanical, Electrical, and Plumbing (MEP) scope for the client.

April 2011/2012 – August 2011/2012 (9 months)

Al-Dahidi Sameer's CV

Page 12 of 17

Master Student Intern (M1 and M2 Years), AREVA NP, Paris La Defense, France

Project 1 (M1 year): Development of a New 3D Core Monitoring System “MAGELAN”.

Project 2 (M2 year): Design Performance Improvement Management of Engineering and Projects Organization Design Center.

January 2009 – May 2010 (1 year and 4 months)

Junior Electrical & Instruments (E&I) Engineer, Consolidated Contractors International Company (CCIC), Abu Dhabi, UAE

Project: Expansion of Abu Dhabi Polymers Company (Borouge) (Project Value: 1.4 Billion USD).

September 2008 – December 2008 (4 months)

Graduate Electrical & Instruments (E&I) Engineer, Kharafi National Limited Company, Kuwait, Kuwait

Project: Expansion of Mina Al-Ahmadi Refinery (MAA).

REFEREEING, GUEST EDITOR & PERMANENT EDITOR

REFEREEING

International Publishers

- **ELSEVIER** Publisher: Mathematics and Computers in Simulation, Bioresource Technology, Journal of Cleaner Production, Results in Engineering, Energy Conversion Management, Sustainable Energy Technologies and Assessments, Next Energy, Applied Energy, Sustainable Energy, Grids and Networks, Reliability Engineering & System Safety, Energy Reports, Engineering Applications of Artificial Intelligence, Computers in Industry, Applied Soft Computing, and Renewable & Sustainable Energy Reviews (**Active Reviewer**)
- **IEEE** Publisher: IEEE ACCESS, IEEE Transactions on Emerging Topics in Computational Intelligence, and IEEE Transactions on Reliability (**Active Reviewer**)
- **SAGE** Publisher: Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, Journal of Vibration and Control, and Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability (**Active Reviewer**), and Advances in Mechanical Engineering (**Active Reviewer**).
- **TAYLOR FRANCIS** Publisher: Journal of the Chinese Institute of Engineers, Energy Sources, Part A: Recovery, Utilization and Environmental Effects, and International Journal of Green Energy (**Reviewer**).
- **WILEY** Publisher: Progress in Photovoltaics: Research and Applications (**Reviewer**).
- **FRONTIERS** Publisher: Frontiers in Energy Research (**Active Reviewer** and **Reviewer Director/Editor**)
- **MDPI** Publisher: Mathematics, Electronics, Energies, Applied Sciences, Sensors, Data, Algorithms, Symmetry, Journal of Marine Science and Engineering, and Sustainability (**Active Reviewer**).
- **SPRINGER-NATURE** Publisher: Electrical Engineering Journal and Reviewer for a Book entitled “*Advanced Control and Optimization Paradigms for Wind Energy Systems*” (**Reviewer**)
- **EMERALD** Publisher: International Journal of Quality and Reliability Management (**Reviewer**)
- **IGI GLOBAL** Publisher: Reviewer for a Book entitled “*Soft Computing Methods for System Dependability*” (**Reviewer**)
- **PHM Society**: International Journal of Prognostics and Health Management (IJPHM) (**Reviewer**)

International Conferences

- International Conference on Engineering and Computing Technologies 2025 (EngiTek-2025) (**Technical Program Committee**).
- The International Conference on Smart Mechanical Systems for Sustainability 2025 (IC-SMSS 2025) (**International Advisory Committee Member**).
- The International Conference on System Reliability and Safety (ICSRS) (**Active Reviewer, Session Chair, and Technical Committee**).
- The International Renewable Energy Congress (IREC) (**Active Reviewer** and **International Program Committee**).
- The Power System And Green Energy Conference (PSGEC) (**Active Reviewer** and **TPC Committee**).

- The International Conference on Clean Energy Storage and Power Engineering (CESPE) (**Steering Committee**).
- The 3rd Asia Power and Electrical Technology Conference (APET 2024) (**TPC Committee**).
- The 22nd International Conference on Research and Education in Mechatronics (REM 2024) (**Active Reviewer and Scientific Committee**).
- The International Conference on Innovation in Mechanical and Civil Engineering (*i-MACE*) (**Active Reviewer, Track Chair of Industrial Engineering and International Advisory Board**).
- The International Conference on System Reliability and Safety Engineering (SRSE) (**Active Reviewer and Technical Committee**).
- The 3rd Edition of International Conference on Industrial Systems and Processes (SPIn2022) (**Scientific Committee**).
- The 4th International Conference on Reliability Engineering (ICRE 2019) (**Active Reviewer and Technical Committee**).
- Annual European Safety and Reliability (ESREL) Conferences (**Active Reviewer and Technical Committee**).
- Annual and European Conferences of the Prognostics and Health Management (PHM) Society (**Active Reviewer**).

GUEST EDITOR

- **Sustainability MDPI Journal:** FIVE Special Issues entitled:
 1. *Sustainable Thermal Management: Innovations in Energy Efficiency and Eco-Friendly Materials* (**Deadline: 15th Jul. 2025**) ([Link](#)).
 2. *Renewable Poly-Generation Systems: Revolutionizing Energy Production and Resource Utilization* (**Deadline: 28th Feb. 2025**) ([Link](#)).
 3. *Safety and Reliability of Renewable Energy Systems for Sustainability* (**Deadline: 28th Feb. 2025**) ([Link](#)).
 4. *Renewable Energy Sources for Electrical Power: Reliability Assessment, Condition Monitoring, Prognostics and Health Management, Production Prediction* (**Closed**) ([Link](#)).
 5. *Advanced Modeling and Simulation for Application in Solar Radiation and Photovoltaic Systems* (**Closed**) ([Link](#)).
- **Advances in Mechanical Engineering SAGE Journal:** TWO Special Collections entitled:
 1. *Next-Generation Renewable Energy Systems Management* (**Deadline: 20th Nov. 2025**) ([Link](#)).
 2. *Advances in Soft Computing Techniques for Computational Engineering* (**Closed**) ([Link](#)).

PERMANENT EDITOR

- **Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability SAGE Journal** ([Link](#)).
- **Journal of Green Technology, Resilience, and Sustainability (SpringerNature)** ([Link](#)).

HONORS AND AWARDS

- **Featured Research Highlight by Argonne National Laboratory:** my [publication](#), “*Maximizing Energy Efficiency in Wastewater Treatment Plants: A Data-Driven Approach for Waste Heat Recovery and an Economic Analysis Using Organic Rankine Cycle and Thermal Energy Storage*”, was **featured** by **Argonne National Laboratory** as a research highlight in **Applied Energy** (March 2024). This recognition underscores the impact of the proposed data-driven approach to maximizing energy recovery in wastewater treatment.
- **Recognition of Teaching Excellence:** Awarded by the Deanship of Graduate Studies at the German Jordanian University for outstanding performance during the 1st Semester of the 2023/2024 academic year.
- Winner of ([2nd rank](#)) the **Distinguished Research Award (DRA)** at the German Jordanian University of 2022/2023 academic year.
- Winner of ([3rd rank](#)) the **Distinguished Academic Award (DAA)** at the German Jordanian University of 2022/2023 academic year.

- Winner of a **Worldwide Part-Time Teaching opportunity** at the Technical University of Applied Sciences Würzburg-Schweinfurt (THWS) for a course entitled “*Artificial Intelligence for Condition-Based and Predictive Maintenance*” on 19th-27th May 2023 at Schweinfurt, Germany.
- Winner of an **ERASMUS+ Staff Mobility opportunity for a Training Program** entitled “*Fault Detection, Diagnosis and Prognosis for Critical PV Systems Components*” at the University of Cyprus, Nicosia, Cyprus, 25th-29th July 2022 (PHYSICAL at Nicosia – Certificate is available).
- Winner of a **Worldwide Part-Time Teaching opportunity** at the University of Applied Sciences Würzburg-Schweinfurt (FHWS) for a course entitled “*Management of Maintenance Systems*” on 13th-21st May 2022 at Schweinfurt, Germany.
- Winner of **Best Poster Award** in the *29th European Safety and Reliability Conference (ESREL 2019)*, Hannover, Germany of the Paper entitled “*Fault Prognostics in Presence of Event-Based Measurements*”, 22nd-26th September 2019.
- Winner of **Excellent Oral Presentation Certificate** in the *2018 3rd International Conference on System Reliability and Safety (ICSRS 2018)*, Barcelona, Spain of the Paper entitled “*Quantification of Uncertainty of Wind Energy Predictions*”, 24th-26th November, 2018.
- Winner of **Excellent Oral Presentation Certificate** in the *2017 2nd International Conference on System Reliability and Safety (ICSRS 2017)*, Milan, Italy of the Paper entitled “*A Dynamic Weighting Ensemble Approach for Wind Energy Production Prediction*”, 20th-22nd December 2017.
- Winner of a **Scientific Research Fellowship** for a one-year post-doctorate in “Development and Application of Methods for Reliability, Availability, Maintainability, Safety (RAMS) of Industrial Components and Systems” at the Energy Department of Politecnico di Milano, 1st June 2016.
- Winner of the **IEEE Reliability Society Scholarship** (Italian Chapter) for the tutorials track in the area of “Diagnostics, Prognostics and Health Management (PHM), and Condition-Based Maintenance (CBM)” within PHM 2013 Conference Politecnico di Milano, 8th September 2013.
- Winner of the **Marie Curie Ph.D. Fellowship** within the European Project InnHF financed by the 7th framework program FP7-PEOPLE-2011- Initial Training Network: Marie-Curie Action at the Energy Department of the Politecnico di Milano – Early-Stage Researcher, 2013.
- Winner of a **Master Scholarship** for two years from the French Government in Nuclear Energy (Operations) at Université Paris-Sud XI and École Centrale Paris, 2010-2012.
- I got the **Second rank among all graduates (535)** from all Jordanian universities in the University Efficiency Examination held by the Ministry of Higher Education and Scientific Research in the (Electrical Engineering) specialization, Jordan.
- **Dean’s list** - Faculty of Engineering, The Hashemite University, Jordan, 2004-2008.

PROFESSIONAL TRAINING

- Delivered a **3-day** training course titled “**Smart Maintenance in Hydraulic and Pneumatic Systems**” on May 12–14 and August 12–14, 2025, in collaboration with **The Academy of Modern Hydraulic Systems Co.** (In-person training; certificates provided).
- Attended the **MENATEX Workshop on “Strengthening Academia-Private Sector Collaboration in Jordan’s Textile Industry”** - organized by School of Architecture and Built Environment at the German Jordanian University, GJU Jabal Amman, Amman, Jordan, April 30th, 2025 (3 hours, in-person).
- Delivered a **30-hour** training course titled “**Preparation for the CMRP**” on March 1–31, 2025, within the Consultation and Training Center at the German Jordanian University (Online training; certificates provided).
- Offered a one-hour seminar as part of the International FDP “**Empowering Innovations: Sixdays International FDP on AI Technologies**” on 13rd July 2024 with a talk entitled “**MATLAB for AI**” (ONLINE – Certificate is available).
- Attended one complete module (30 contact hours in 10 days) “**Certified Maintenance and Reliability Professional (CMRP)**” at the **Engineering Tracks**, Online, April 16th-May 18th 2024 (ONLINE – Certificate is available).
- Offered one complete module (60 contact hours including interactive exercises, group work, etc., in 6 days) “**Artificial Intelligence for Condition-Based and Predictive Maintenance**” at the **University of Applied Sciences Würzburg-Schweinfurt (FHWS)**, Schweinfurt, Germany, May 19th-27th 2023 (PHYSICAL at Schweinfurt – Certificate is available).

- Attended **GJU Innovation Ambassadors Training Accredited Program (3rd Batch) [Innovation Management Level 1]** organized by the Deanship of Innovation, Technology Transfer and Entrepreneurship (DI-TECH) of the German Jordanian University, Landmark Hotel, Amman, Jordan, December 15th & 17th, 2022 (15 hours) (PHYSICAL – Certificate is available).
- Participated in the ERASMUS+ Staff Mobility for Training Program **“Fault Detection, Diagnosis and Prognosis for Critical PV Systems Components”** at the **University of Cyprus**, Nicosia, Cyprus, July 25th-29th 2022 (PHYSICAL at Nicosia – Certificate is available).
- Offer one complete module (60 contact hours including interactive exercises, group work, etc., in 6 days) **“Management of Maintenance Systems”** at the **University of Applied Sciences Würzburg-Schweinfurt (FHWS)**, Schweinfurt, Germany, May 13th-21st 2022 (PHYSICAL at Schweinfurt – Certificate is available).
- Attend **Online & Blended Learning (First Level)** training program organized by the Consultation and Training Center of the German Jordanian University, October - December, 2021 (22 hours) (ONLINE – Certificate is available).
- Attend **E-learning Dialogue Session** organized by Online Training Center, German Jordanian University, Amman, Jordan, April 23rd, 2020 (2 hours) (ONLINE – Certificate is not available).
- Attend **GJU Deep Knowledge Gateway Training** (GJU electronic library, GJU e-library outside campus, different available databases, etc.) organized by TechKnowledge (Leading specialized electronic information solutions provider in the middle east – a provider of Al-Manhal, SAGE, and other important databases), Amman, Jordan, April 9th, 2020 (1 hour) (ONLINE – Certificate is not available).
- Attend **How to Publish your research Globally?** Webinar (selecting the right Journal, structuring your paper, publication process, the peer review process, publication ethics, getting discovered, dissemination, and promotion) organized by Emerald Publishing, Amman, Jordan, April 9th, 2020 (2 hours) (ONLINE – Certificate is available).
- Attend **AI Bootcamp** (Python basics, Data Science, Machine Learning, Artificial Intelligence, Computer Vision) organized by Phi Science Institute, Amman, Jordan, March 27th-30th, 2020 (ONLINE – Certificate is available).
- Attend **Arab Artificial Intelligence Summit** organized by Phi Science Institute & Beyond Limits, Amman, Jordan, October 29th-30th, 2019 (Certificate is available).
- Attend **Advanced Teaching and training on Smart grid and Grid Integration of Renewable Energy Systems** (AT-SGIREs project funded by the EU through the ERASMUS+ Programme) Training Course (Challenges for Grids integration from RES and teaching and learning methods knowledge transfer) organized by the Hamburg University for Technology in the framework of EU-funded project AT-SGIREs in Hamburg, Germany, September 16-20, 2019 (Certificate is available).
- Attend **Advanced Teaching and training on Smart grid and Grid Integration of Renewable Energy Systems** (AT-SGIREs project funded by the EU through the ERASMUS+ Programme) Capacity Building Course (Smart Grids and laboratory sessions using PVSYST and Openmuc) organized by the University of Cyprus in the framework of EU-funded project AT-SGIREs in Nicosia, Cyprus, February 4-8, 2019 (Certificate is available).
- Attend **Intensive Wind Energy Workshop** (topics covered are global wind status, wind Atlas – Maps, Types, Parts, Projects, Developers) organized by AMC Training and Consulting in Amman, Jordan, February 4-8, 2019 (Certificate is available).
- Attend **Adapt2Job – 2win-Training 4th edition** entitled “Digitalization 2018 and beyond” organized by a2J and SMS group in German Jordanian University, Madaba, Jordan, September 23-27, 2018.

PROFESSIONAL MEMBERSHIP

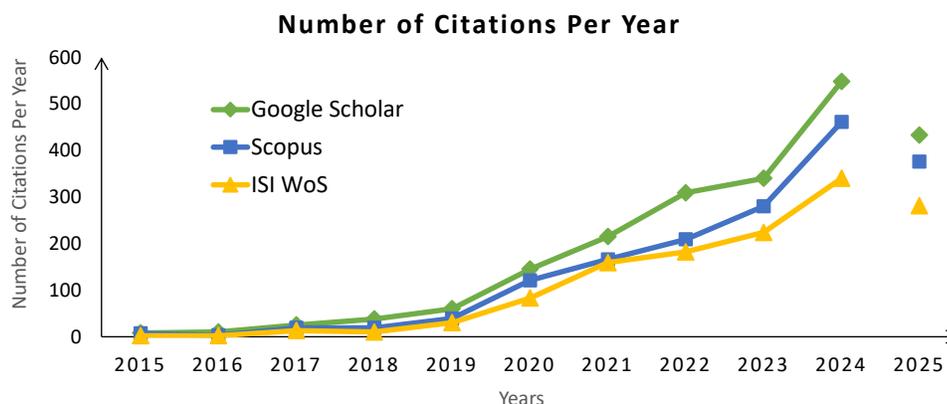
- Society for Maintenance and Reliability Professionals (SMRP) (December 2023 - Present).
- IEEE Society: Power & Energy Society (PES), Computational Intelligence Society (CIS), Reliability Society, and Industry Applications Society (January 2024 - Present).
- Advanced Teaching and training on Smart grid and Grid Integration of Renewable Energy Systems (AT-SGIREs) network (February 2019 - Present).
- Jordanian Engineers Association, Electrical Engineering, Member (June 2008 - Present).

RESEARCH STATISTICS

SYNTHETIC NUMERICAL INDICATORS:

Up to July 2025

	Google Scholar	Scopus	ISI Web of Science
<i>H-index</i>	29	25	23
<i>Number of Publications</i>	122	106	88
<i>Number of Citations</i>	2,240	1,781	1,395



LANGUAGES

Arabic: Native,

English: Fluent,

French: Good,

Italian: Good.

COMPUTER SKILLS

MatLab: Professional,

LaTeX: Basic,

MS Office: Professional,

Windows: Professional.

PROFESSIONAL WEBPAGES

German Jordanian University: [Link](#) | ResearchGate: [Link](#) | LinkedIn: [Link](#) | Google Scholar: [Link](#) | Personal Professional Website: [Link](#) | Scopus Author Identifier: 56271830200 | Web of Science ResearcherID: AFM-7470-2022 | ORCID ID: 0000-0002-7745-7784 | IEEE Membership ID: 94052776

REFERENCES

Iyas KHADER (Full Professor)

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Enrico ZIO (Full Professor)

Energy Department, Politecnico di Milano, Milan, Italy | MINES ParisTech, PSL Research University, CRC, 06560 Sophia Antipolis, France

Tel. (Italy): +39 (0)2 2399 6340 | E-mail: enrico.zio@polimi.it

Piero BARALDI (Full Professor)

Energy Department, Politecnico di Milano, Milan, Italy

Tel.: +39 (0)2 2399 6340 | E-mail: piero.baraldi@polimi.it

Ismael Al-Hinti (Full Professor)

President, Al Hussein Technical University (HTU), Amman, Jordan

Tel.: +962 6 580 8787 | E-mail: ismael.hinti@gju.edu.jo