alsaheb@ppu.edu



PROFESSIONAL SUMMARY

Vision-driven change agent with a career-long record of computer science instruction and leadership success for leading organizations

Proven experience in aligning business strategy and objectives with established technological and instructional paradigms to achieve maximum operational impacts with minimum resource expenditures. An efficiency-focused thought leader with expertise spanning database design and tuning, software engineering, quality metrics, and testing, BPM and BPMN, bioinformatics, quality assurance, cross-functional team leadership, complex problem-solving, client relationship management, and project management. A quality-focused leader with expertise in implementing ABET and QAA, design of educational programs, student mentorship and supervision, quality in higher education, information security policies, and eLearning quality. Exceptionally dedicated professional with keen interpersonal, communication, and organizational skills.

EDUCATION

DOCTOR OF PHILOSOPHY (PH.D.) IN COMPUTER SCIENCE, 1998 Bucharest Polytechnic University

MASTER OF SCIENCE (M.SC.) IN COMPUTER SCIENCE, 1988 Syracuse University, Syracuse, NY

BACHELOR OF ENGINEERING (B.ENG.) IN COMPUTER ENGINEERING, 1983 King Abdul-Aziz University

CERTIFICATES

PYTHON FOR GENOMIC DATA SCIENCE, 2020, https://coursera.org/share/a2a37d2d261b88cd636e22d370bf8d5b

Johns Hopkins University ETL using SSIS Udemy BUSINESS PROCESS AND DECISION MODELING CERTIFICATE, 2016 BUSINESS PROCESS MODELING AND ANALYSIS CERTIFICATE, 2013 Hasso Plattner Institute for Software Systems Engineering

PROFESSIONAL APPOINTMENTS

PALESTINE POLYTECHNIC UNIVERSITY, HEBRON, WEST BANK, PALESTINE, 2015 – 2022 ASSOCIATE PROFESSOR at the IT and COMPUTER ENGINEERING COLLEGE/ ASSOCIATE PROFESSOR at the IT GRADUATED STUDIES (MASTER of INFORMATICS)

- Ph.D. program coordinator of the Information Technology Engineering program
- Teach B.Sc. and Master level courses
- Team leader for ABET Accreditation preparations
- Team member for developing the Ph.D. of Information Technology Engineering program
- Master thesis advisor and research activities
- QA team leader for using VR in education Erasmus project

ARAB AMERICAN UNIVERSITY, PALESTINE, 2014–2015

VISITING PROFESSOR at the COLLEGE OF ENGINEERING and IT

- Teaching Database Systems, Information Retrieval, and Software Testing for an undergraduate program
- Teaching Advanced Database Management Systems for a graduate program
- Participating in QA activity

PALESTINE POLYTECHNIC UNIVERSITY, HEBRON, WEST BANK, PALESTINE, 2012–2014 ASSOCIATE PROFESSOR at the IT and COMPUTER ENGINEERING COLLEGE/ ASSOCIATE PROFESSOR at the IT GRADUATED STUDIES (MASTER of INFORMATICS)

- Teach B.Sc. and Master level courses
- Master thesis advisor and research activities
- QA team leader for the e-Gov Tempus project

DIRECTOR of the QUALITY ASSURANCE UNIT, September 2008 – September 2012

- Developing students satisfaction survey and employees satisfaction survey
- Yearly reports for analyzing the results of the satisfaction surveys, and the needed corrective actions
- Developing the Quality Assurance Manual
- Grants and projects for developing the strategic plan, staff, and HR and archiving systems
- Training courses for teaching, learning, and assessment methods

DEAN of the ADMINISTRATIVE SCIENCES and INFORMATICS COLLEGE, September 2004 – September 2008

- Led a team for developing and getting accreditation for the Master of Informatics Program
- Participating in many projects including RUFO Tempus project
- Director of "PPU Self-Assessment and Strategic Planning," Grant No. 01/2005-004 WB-C
- Participated in Quality Assurance and Institutional Self-Evaluation Project "QUAITE M011B04-PS"
- Participated in the "Quality in Higher Education: From Assurance to Enhancement" seminar from 28/9-11/10.2004 in the UK

ASSISTANT PROFESSOR in the INFORMATION TECHNOLOGY DEPARTMENT, June 2003 – September 2004

• Teaching many courses including Database Systems, Software Engineering

HEAD of the INFORMATION TECHNOLOGY DEPARTMENT, October 2001 – June 2003

- Developing the Computer Graphics and Multimedia academic program
- Teaching many courses including Database Systems, Software Engineering

ASSISTANT PROFESSOR at the ADMINISTRATIVE SCIENCES and INFORMATICS COLLEGE, October 1999 – 2001

• Teaching many courses including Database Systems, Software Engineering

HEAD of the ADMINISTRATIVE SCIENCES and INFORMATICS DEPARTMENT, October 1998 – 1999

- Manage the department's activities
- Leading a team for developing the Admission and Registration System for PPU

FULL-TIME LECTURER, DEPARTMENT of COMPUTER ENGINEERING and INFORMATION SYSTEMS, 1991 – 1997

• Teaching many courses including systems programming, programming languages, data structure, and database

HEAD of the COMPUTER ENGINEERING and INFORMATION SYSTEMS DEPARTMENT, 1989 – 1991

• Managing and developing the academic programs in the department

HEAD of the COMPUTER DEPARTMENT, 1985 – 1986

- Manage the associate degree of computer programming program
- Developing Office Automation associate degree program, which has been adopted in all the Palestinian community colleges

FULL-TIME LECTURER, COMPUTER DEPARTMENT, 1983 – 1984

• Teaching associate-level course

PUBLICATIONS

- A. Natsheh et.al, "A Reinforcement Learning Model of Temporal Difference Variations for Action-Selection and Action-Execution in the Human Brain", 2023 International Conference on Information Technology (ICIT), Aug 2023 https://edas.info/showPaper.php?m=1570909496
- D. Voskergian and M. H. Saheb, "AMAR_ABSA: Arabic Mobile App Reviews Dataset Targeting Aspect-based Sentiment Analysis Tasks," 2022 Innovations in Intelligent Systems and Applications Conference (ASYU), 2022, pp. 1-7, doi: 10.1109/ASYU56188.2022.9925324. <u>https://ieeexplore.ieee.org/document/9925324</u>
- Rasha Assaf, Mahmoud Saheb, "Dataset for Fake News in the Arabic Language", The 15th IEEE International Conference on Application of Information and Communication Technologies, 2021, <u>http://www.aict.info/2021/info/AICT2021-Conference-Program.pdf</u>
- Thaher, T.; Saheb, M.; Turabieh, H.; Chantar, H. Intelligent Detection of False Information in Arabic Tweets Utilizing Hybrid Harris Hawks Based Feature Selection and Machine Learning Models. *Symmetry* 2021, *13*, 556. https://doi.org/10.3390/sym13040556
- Shroug Alshreef, M. H. Saheb, Selecting the Optimal Web Service Composition Based on QoS, Transactions on Networks and Communications, Volume 7, No 2, April 2019, DOI: 10.14738/tnc.72.6516, http://scholarpublishing.org/index.php/TNC/article/view/6516/3883
- H. M. Hijawi, M. H. Saheb, Vol 8, No 3, August 2015, (2015), Sequence Pattern Mining in Data Streams, Computer and Information Science, ISSN 1913-8989 (Print) ISSN 1913-8997 (Online), DOI: 10.5539/cis.v8n3p64, ccsenet.org/journal/index.php/cis/article/view/48654
- Mahmoud Hasan Saheb, December 2013. Information Security Policies at Universities: A Case study. Cybrarians Journal, Issue 33, ISSN 1687-2215.
- Mahmoud Hasan Mahmoud Saheb, 2013. Time Analysis for BPMN Gateways Using Queuing Theory. Information Technology Journal, eISSN: 1812-5646 pISSN: 1812-5638, 12: 1772-1779. DOI: 10.3923/itj.2013.1772.1779, URL: <u>http://scialert.net/abstract/?doi=itj.2013.1772.1779, docsdrive.com/pdfs/ansinet/itj/2013/1772-1779.pdf</u>
- Samer Wohosh, M.H. Saheb, "Indexing for Large DNA Database Sequences," IJBB, Volume (5): Issue (4): 2011, ISSN -1985-2347, <u>www.cscjournals.org/csc/manuscript/Journals/IJBB/volume5/Issue4/IJBB-125.pdf</u>
- M.M. Aldasht, M.H. Saheb, I. Najjar, M.H.Tamimi, T.O. Takruri, University Course Scheduling Using Parallel Multi-Objective Evolutionary Algorithms, (JATIT), <u>www.jatit.org</u>, Vol 22 No. 2, December 2010 Issues, <u>www.jatit.org/volumes/research-papers/Vol22No2/8Vol22No2.pdf</u>
- M.H. Saheb, Efficient algorithm for overlap-join, Information Technology Journal, 10:201-206, DOI:10.3923/itj.2011.201.206,19/10/2010, scialert.net/fulltext/?doi=itj.2011.201.206
- M. Saheb, M. Anabtawi, S. Sultan, Quality Indicators in West Bank Universities, ULUM INSANIAH, Autumn Year 2008 Issue 36. <u>www.ulum.nl</u>

CONFERENCES

- The gap between ICT Industry needs and Graduate Qualifications, AAUJ, May 20, 2015.
- Dia Abu Zenah, Mahmoud H. Saheb, "روسم النصوص العربية بشكل آلي ودور ها في معالجة اللغة العربية آليا". The 3rd Palestinian Symposium on Computational Linguistics and Arabic Content (iArabic'2014), sina.birzeit.edu/iarabic14-ar/
- Dia Abu Zenah, Mahmoud H. Saheb, "A Novel Approach to Capture The Common Syntactical Rules for The Holy Quran," PID034, <u>NOORIC'2013. nooritc.org/sites/default/files/ConfProg_Full_Landscape_Format_v15.pdf</u>
- Al-Saheb Mahmoud, Daniel Possan, "E-Learning Quality Framework," 3rd Palestinian International Conference on Computer and Information Technology (PICCIT 2010), PICCIT 2010.
- M. Dasht, M. Al-Saheb, "University Course Scheduling Using Evolutionary Algorithm," 2009 Fourth International Multi-Conference on Computing in the Global Information Technology, Page 47-51.
- Zein Abed, M. Al-Saheb, M. Jalud, "The relationship between the implementation of the coming Palestinian Electronic Government and the performance according to the view of the official general managers." مؤتمر الاتجاهات والمداخل الادارية المعاصرة Palestine-Hebron2-3/12/2008.
- Al-Saheb Mahmoud, Qurei' Ahlam, Tomezah Jamil, "Achieving Progress Indicators for Computer Skills," Learning Quality Assurance in Palestine Conf., Ramallah, 16-17/12/2007
- AL-Saheb Mahmoud, Abo-garbieh Elayan, "Quality In Engineering Education, Engineering Education in Palestine Conference," Palestine Polytechnic University, 18-19/5/2005.
- AL-Saheb Mahmoud, Abo-garbieh Elayan, "PPU Experience in Evaluation and Quality Control," Conference on Quality of Teaching in Palestinian Universities, Quds Open University, Ramallah, 3-5 July 2004, Book of Abstracts page 19.
 www.qou.edu/arabic/qulityDepartment/qulityConference/pepars/session3/

- Sultan Suheil, AL-Saheb Mahmoud, ISO9000 In PPU IT Department, Conference on Quality of Teaching in Palestinian Universities, Quds Open University, Ramallah, 3-5 July 2004, Book of Abstracts page 25. www.qou.edu/arabic/qulityDepartment/qulityConference/pepars/session3/
- AL-Saheb Mahmoud, "Effective Web-Based Syllabus Reflecting the QAA recommendations," ACIT2003 Conf, Egypt 20-23/12/2003.
- R. Tahboub, M. Alsaheb, "Security in Database Web Access," Sixth Scientific Conference on IT, Baghdad, Iraq, November 2000.
- Al-Saheb M. and Shahin G. "Information Bank for Higher Education in Palestine," Conference on Information Technology in Higher Education in Palestine, Alquds University, 5-7/3/97.
- Al-Saheb M. "Software Testing Of Business Applications," Third Computer Conference, Palestine Polytechnic Institute, 1988.
- Al-Saheb M. "Arabic Data Entry Forms," First Computer Conference, Alquds University, 1985.

TECHNICAL PUBLICATIONS

- M. H. Saheb, "Information Systems Integration," PPU, 2014
- M. Al Subu, M.H. Saheb, Walid Deeb, "Guide for the Promotion and Implementation of Quality Culture in Arab Universities," "تعزيز ثقافة الجودة وممارستها في الجامعات العربية", Tempus Altair project, 2011, <u>www.altair-project.org</u>
- M. H. Saheb, "PPU Information Security Policy," PPU, 2010
- L. Arafeh, M. AL-Saheb, H. Elaydi, H. Abdul Nour, "Information Technology And Electrical Engineering Benchmarks Document," First edition, UNESCO Funded Project, December 2007, <u>site.iugaza.edu.ps/helaydi/files/2010/02/IT_EE_First_Version_Copy1.doc</u>
- H. Badr, M.H. Saheb, H. Al-Aedi, A. Yahya, "Information Technology Programs at Palestinian Universities General Evaluation Report"

PRACTICAL EXPERIENCE

- Consulting services for Trusted Systems Comp., 2001 2022, Business Analysis, Database Design, and Tuning, SQL complex query development and DB Tuning, Software Testing
- Utilized software systems for BPM and BPMN2, including BizAgi, Bonita, Signavio, and Visio2010.
- Provided Quality Assurance consulting for many projects.
- Supervised many software graduation projects.
- Led a team responsible for computerizing the Admission and Registration Department, including analysis, design, and implementation using ACCESS and SQL servers.
- Served as Team Leader for University Information Systems Integration and University Information Security Policy.
- Designing and programming many commercial software systems for the local market, such as ERP for NGOs, University RegSystems, School Management, and Medical Laps.
- Demonstrated expertise in the use of many tools, programming languages, and database management systems, including SQL, HQL, Python, JDeveloper 11g, Oracle 12c, MS-SQL Servers, ACCESS, Visual Basic, C, Prolog, Excel, and WEKA.
- A designer and technical consultant for many projects for many firms.

MASTER'S THESES SUPERVISION

- Reliability in SW Life Cycle Early Stages (2021)
- Testing Usability of Arabic web forms: Label placements and Date fields, PPU (2017)
- Selecting the optimal web service composition based on QoS, PPU (2017)
- A Neuro-Computational Model of DAT1 and COMT Contributions to Learning from Positive and Negative Feedback, PPU (2016)
- Automatic Coding for Business Applications Using ER-models and BPM, PPU (2016)
- Time Analysis for BPM, PPU (2014)
- Searching in Large DNA Database Sequences, PPU (2011)
- e-Government, QU-Abudees (2010)

UNDERGRADUATE TEACHING EXPERIENCE

- Data Structures
- DBMS
- Information Retrieval

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- Software Engineering
- Software Testing
- Systems Programming
- Programming Languages
- Algorithms Design and Analysis
- Operating Systems

GRADUATE TEACHING EXPERIENCE

- Advanced Software Engineering
- Advanced Database Systems
- Business Process Modeling (BPM)
- Software Quality Metrics and Testing
- Information Retrieval

RESEARCH EXPERIENCE

During my work at PPU, I have participated in many projects funded by UNDP, World Bank, AMIDEAST, and the EU. Also, I headed many committees as E-Learning Committee, PPU Information Security Committee.

I have practical experience in developing large systems such as Municipalities Billing Systems, Healthcare Management Systems, and University Admission and Registration Systems.

I have supervised many master's theses, and I have participated as a member of the internal and external discussion committees for many master theses. The last thesis that I supervised was related to UX/UI; Usability of Date formats and Label placement in Arabic WebForms. I am a member of the Review Committee of IAJIT.

My research areas are related to Database Design, IR, BPM, and BPMN, Software testing, Bioinformatics, eLearning Quality, and Quality in Higher Education.

PROFESSIONAL AFFILIATIONS

- Co-Founder of Trusted Systems Comp (<u>www.ts.com.ps</u>)
- Member of the AQAC Board (www.aqac.mohe.gov.ps)
- Member of the e-Content Committee within the Belgium e-Learning Project
- Member of User Experience Professionals Association International (UXPA)
- Member of the International Arab Journal of Information Technology (IAJIT) editorial board (www.iajit.org)
- Participated in the EU-Southern Mediterranean Seminar on Recognition of Credits and Qualifications, Brussels (1-2 June 2015)
- Participated in training the External Evaluators Workshops working AQAC for scientific and literature university programs (2011)
- Leading Quality Assurance work package for e-Gov Tempus project, coordinated by BZU (<u>www.egovacademy.ps/about/</u>)
- Participated in the first PFDP National Roundtable Seminar titled "History and Development of World Universities and Higher Education Systems" from September 23-24, 2011 in Ramallah.
- Presenter of third roundtable PFDP seminar titled "Strategic Planning in Higher Education," November 18-19, 2011, Jericho
- Member of the IT programs evaluation team in MOHE
- Member of three essential committees at PPU: Quality Assurance, e-Learning, and Scientific Research
- Director of "PPU Self-Assessment and Strategic Planning," Grant No. 01/2005-004 WB-C
- Participated in RUFO study and training tour (12-24/3/2006), Spain and France
- Participated in RUFO workshops and activities (Started Nov 2006) as PPU correspondent
- Member of the Quality Assurance Committee for RUFO eLearning Courses
- Participated in the PEI workshops and activities (started Oct 2006)
- Participated in Quality Assurance and Institutional Self-Evaluation Project "QUAITE M011B04-PS"
- Participated in the "Quality in Higher Education: From Assurance to Enhancement" seminar from 28/9-11/10.2004 in the UK
- Represented the university in the UNDP "Assessing the Quality and Impact of Academic Programs in Arab Universities Project;" this included: attending many workshops in Jordan and Tunis, preparing the Self Evaluation Document for this project, and working as External Reviewer for two programs in Jordan University and al-Zarqa private university with two international experts from QAA
- Developed the Bs.C. Program; Academic Curriculum of the Graphics and Multimedia

- Represented the college in different meetings regarding the development of community college programs and Information Technology in Palestine
- Participated in developing an academic curriculum for the 2-year "Software and Databases" and "Office Automation" Associate degrees

VOLUNTEERISM

- AQAC board member, 2008-2012
- Palestinian Engineering Association election committee 2006
- Member of the International Arab Journal of Information Technology (IAJIT) editorial board since 2005
- Member of Al-Ihsan Charitable Society

ADDITIONAL INFORMATION

Languages: English, Arabic

Technical Proficiencies:

- Software Engineering: Business Requirements Analysis and UML, RUP, BP Modeling and BPMN, Testing, SDLC, DBLC, QA
- Database: Database designing, Complex Query Development, Query and Database optimization, ETL
- Languages & Tools: UML, BPMN2, SQL Server, T-SQL, SQL-Analytical Functions, MS Access, VB.Net, Oracle 12c, SQL*Plus, RMAN, PL/SQL, Apex, C++, WEKA, Junit, Notepad++, PowerShell, Python and Anaconda
- **BPM & Workflow**: Bizagi, Bonita, and Signavio

Soft Skills: lifelong learning, communication, flexibility, conflict negotiation, and leadership

Interests: Swimming, Table Tennis Playing, Arabic Poetry Writing