Hossam Almahasneh, PhD



**General Information**

Date of Birth: 15 Nov. 1983

Nationality: Jordanian

Residence: Amman, Jordan

**Contact Information**

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**Research Areas & Interests**

10+ years of experience in Artificial Intelligence, Digital Transformation, Applications Management, Project Management PMP, Service Management, IT Support, Business Analysis and manpower outsourcing. I have a proven track record of Project management and System/ Infrastructure Management, more than 7 Systems in many areas (UAE Government, Dubai Taxi Corporation, Road and Transport Authority, and Sharjah University).

Proven ability to build, lead and motivate high performance teams. History of building software systems with improved functionality and productivity, consistently meeting critical requirements. Talent acquisition and Manpower optimization according to business requirement with more than 90% optimality and efficiency. Play a key role in project management from POC to support. Driven business process improvements.

**Areas of Expertise**

Artificial Intelligence

Machine Learning

Business Intelligence

Project management

Digital transformation

Research and Development

Cognitive Task analysis (Business Analyst)

Data Analysis

Statistical Analysis

Brain- Computer Interface

Pattern Recognition and Classification

**Education**

Jun.11 – May.17 **Ph.D., Artificial Intelligence**

**Institute of Health and Analytics - Universiti Teknologi PETRONAS**

**Areas of study :**

* Machine-Learning Algorithms
* Artificial Intelligence
* Data Analysis
* Statistical Analysis
* Software Engineering
* Quantitative And Qualitative Research Analysis
* Business Intelligence

May.09 – Oct.10 **M.S.,** **Information Technology/ Computational Intelligence**

**Universiti Utara Malaysia**

Oct.01 – Jun.06 **B.S.,** **Information Technology**/ **Software Engineering**

**Philadelphia Private University**

**Work Experience**

Feb. 2021 – Present

**Chief Technology Officer (CTO) – Broccoli Jordan**

* Responsible for overseeing the development and dissemination of technology for external customers, vendors, and other clients to help improve and increase business. They may also deal with internal IT operations if a company is small and doesn't have a chief information officer.
* help set up the corporate strategy and fuel technological infrastructure, will analyze target markets, and create business models.
* act as a liaison between the customer and the business by taking on the responsibilities of customer relations, getting a grasp on the target market, and helping deliver IT projects to market.
* envision how technology will be used within the company while setting the technical strategy for the company.
* look at how to further implement new technologies within the company to ensure its success.
* oversee the company's data, security, maintenance, and the network of a company and may implement (but not necessarily set) the company's technical strategy.

2013 – 2020

**Business Intelligence and AI-based Digital Transformation**

Support product, sales, and leadership and marketing teams with insights gained from analyzing company data. Using large data sets to find opportunities for product and process optimization and using models to test the effectiveness of different courses of action. Strong experience using a variety of data mining/data analysis methods, using a variety of data tools, building and implementing models, using/creating algorithms and creating/running simulations.

* Work with stakeholders throughout the organization to identify opportunities for leveraging company data to drive business solutions.
* Mine and analyze data from company databases to drive optimization and improvement of product development, marketing techniques and business strategies.
* Assess the effectiveness and accuracy of new data sources and data gathering techniques.
* Develop and customize business models and algorithms according to the business data and behavior trend.
* Conducts periodic program health and value assessments with program sponsor.
* Use predictive modeling to increase and optimize customer experiences, revenue generation, ad targeting and other business outcomes.
* Develop business related testing framework and test model quality, efficiency and effectiveness.
* Coordinate with different functional teams to implement models and monitor outcomes.
* Develop processes and tools to monitor and analyze model performance and data accuracy.

Jun. 2018 – March 2020

**IT support management and ERP support – Kafaat Computer Software House, Dubai - UAE**

My role as an SME and as a Technical Advisor is to manage organization applications by proposing new enhancements and responding to new requirements that arise from business clients with the aim of supporting their business in evolving at the same pace of new disruptive technologies and trends.

Responsibilities include but not limited to the following:

* **Business Analyst**: Gather business requirements, providing direction and scope to align technology with the organization strategy and priorities business needs. Create and synthesize business requirements in BRD. Communicate to the Business to guide initial thinking from initial idea into a project proposal or change RFC.
* **IT Service Management**: Develop and maintain IT Operations procedures; Develop and monitor the performance standards in accordance with agreed SLA. Operations scheduling / change management and SLA monitoring; Establish and implements automated IT monitoring tools and infrastructure environments.
* **Applications Management**: Assume management responsibility for the Support, analysis, evaluation, development, testing and implementation of complex computer software applications (more than 15 applications) for assigned Authority divisions or program areas. Develop project time lines and identify project tasks.
* **Project Management**: Manage and participate in the development and implementation of goals, objectives, policies and priorities for assigned programs. Recommend, develop and administer policies and procedures and applications vulnerabilities and assist in creating RFP. Plan, direct, coordinate and review the work plan for System Administrators staff and Helpdesk team. Assign work activities, projects and programs. Review and evaluate work products, methods and procedures. Prepare various documentation including project reports, process and user manuals, presentations, strategic and technical plans, test cases and BRD and other related information on assigned application analyses. Meet and negotiate with vendors regarding software and hardware procurement and maintenance. Ensure compliance with contract specifications. Consult with vendors regarding system functionality.
* **Talent Acquisition and Outsourcing**: Developed and managed all recruiting activities for the company by implementing innovative company-wide recruiting strategies, processes and procedures. Successfully implemented a new applicant selection approach using cognitive task analysis resulting in improved user and candidate experience. Developed and strengthened relationships with key executives and hiring managers throughout the company. Provide talent acquisition and outsourcing consultation according to business requirement using manpower optimization approaches such as Bees algorithm. Reduce manpower recruiting operational costs by 30% with maintaining high efficiency and effectiveness. Updated and maintained all job board postings. Increased candidate flow by over 400%.

Jun. 2017 – May. 2018

**AI/ Data Technical Advisor – Surface Mobility Consultant LLC – RTA Dubai - UAE**

Futuristic multi-modal transportation command and control center which monitors and controls all of Dubai's mass transit, including the Dubai Metro, Dubai Tram, public buses, taxis and marine transit, and traffic control systems all under one roof, and also supports the requisites of hosting Dubai Expo 2020

* I was part of a team appointed by the Roads and Transportation Authority (RTA-Dubai) as a Technical advisor to provide intelligent transportation system consultation at the Enterprise Command and Control Centre (EC3), the cutting-edge transportation command and control center for controlling traffic flow and providing on-ground support for public transportation modules.
* The course of work involved handling traffic and transportation data collection at large scales and analyzing traffic and transport data using machine learning and statistical analysis techniques for transportation, in addition to flow planning and forecasting.
* The daily work performed included supervising in-house and on-ground operation teams during events and incidents, daily operation management, work schedule planning and work prioritization.
* The engagement required collaboration with other traffic and transportation agencies including TRA and traffic police and coordination with transportation emergency and crisis teams during events and high priority incidents.

**Research Experience**

Jan. 2020 – present PI: Dr. Imad Alsyouf

**Affiliated Member, Industrial Engineering & Engineering Management, University of Sharjah,**

**Sharjah - UAE**

Work as a part time researcher with Sharjah University in the field of data analysis using machine learning.

To provide subject-specific research expertise to, and undertake specific research work for the Principal

Investigator (PI) and their research team for funded projects. To achieve the goals set out in the research

proposal.

* Work closely with research team to prepare proposals based on business requirements, research, and development plans.
* Prepare required funds documents and POCs.
* Supervise junior research members.
* Conduct literature review, problem formulations and hypothesis justifications.
* Conduct research experiments, algorithm testing, statistical analysis, and reporting.
* Prepare publications drafts.
* Identify copyrights and patents opportunities and prepare documentations.

June 2011 – April 2017 Advised by: Prof. Nidal Kamel

**Machine Learning Researcher - Universiti Teknologi PETRONAS, Malaysia**

* Work closely with development teams to ensure accurate integration of machine learning models into research and development platforms
* Develop the team’s capabilities in data science and machine-learning, and apply them to create new data-driven insights
* Create innovative, systematic strategies based on peer-reviewed research process
* Introduce cutting-edge techniques and innovative data sources across the Fund
* Design, conduct, and report results from prototype or proof-of-concept research projects that focus on 1) new tools, methods, or algorithms, 2) new scientific domains or application areas, or 3) new data sets or sources
* Worked as part of a Mission oriented research team and collaborating with platform engineers, business SMEs and technology delivery teams to deliver strategic cognitive computing research projects from design to execution
* Worked on the entire lifecycle of a research project developing the design with the R&D Lead
* Collaborated with business experts for business understanding as well as working with other Research Scientists and Platform Engineers for solutions and with Technology teams for prototyping and client pilot implementations.

**Field Supervision**

**2017** Unlocking Innovation through Social Media Usage: A Study in UAE – UAE University

**2017** The readiness of Jordanian Islamic Banks for ISO 31000:2009 standard Implementation for Non-Financial Operational Risks (NFOR) - SBS Swiss Business School

**2019** Impact of Digitalization in Improving It Help Desk Services within RTA - Birmingham Business School

**2019** Governance under the Digital Transformation of Smart Government Services - Mohammed bin Rashid School of government

**2020** Selecting Maintenance Practices Based on Environmental Sustainability Criteria; a Framework and a Case Study from Public Transport Sector in Dubai/UAE - University of Sharjah

**2020** Digital Transformation- based Artificial Intelligence for Supporting Smart Police Station in Dubai Police – Dubai Police – Dubai

**Teaching Experience**

**Sep. 2020 – present**

Adjacent Lecturer - Jordan University for Science and Technology, Irbid- Jordan

**Sep. 2019 – Jan. 2020**

Associate lecturer - Hamdan bin Mohammed Smart University, Dubai-UAE

**June 2011 – April 2017**

Teaching assistant for different undergraduate and postgraduate programs- Universiti Teknologi PETRONAS, Malaysia

**June 2014 – April 2017**

Research adviser for different undergraduate final year projects- Universiti Teknologi PETRONAS, Malaysia

**Memberships and Affiliations**

**2021-present** Establishment committee member of Artificial Intelligence and Entrepreneurship association

**2013-present** IEEE - Signal and Systems

**2020-present** Affiliated Member, Industrial Engineering & Engineering Management, University of Sharjah, Sharjah – UAE

**2021-present** Co-founder board member of Jordanian Association for Artificial Intelligence and Entrepreneurship

**Publications**

**2021** Frontal Lobe real-time EEG Analysis using machine learning techniques for mental stress detection

The Journal of Integrative Neuroscience

**2020** Selecting maintenance practices based on environmental criteria: a comparative analysis of theory and practice in the public transport sector in UAE/DUBAI

International Journal of System Assurance Engineering and Management

**2018** The Variation in the Brain Effective Connectivity due to Driving using Partial Directed CoherenceThe Engineering in Medicine and Biology Conference Management System (EMBC’17)

**2015** R-principal subspace for driver cognitive state classification

37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC

**2014** Topographic map analysis for driver cognitive distraction

IEEE Conference on Biomedical Engineering and Sciences (IECBES)

**2014**  EEG based driver cognitive distraction assessment

5th International Conference on Intelligent and Advanced Systems (ICIAS)

**2014** Oriented Energy in r-Principal Subspace for the Assessment of Driver Cognitive StateBiomedical Signal Processing and Control

**2014** Deep in thought while driving: An EEG study on drivers' cognitive distraction

Transportation Research Part F: Psychology and Behaviour

**Patents**

**2013** Subspace-based Detection Method for the Driver's Cognitive Distraction using EEG (method and apparatus)

**2013** System for Detecting Driver Cognitive Distraction Using sub-space based technique

**Additional information**

**Courses & Certificates:**

**2018** Professional Project Management (PMP)- (**3Fold – PMI)**

**2018** ITIL foundation (ongoing)

**2018** Programming Chatbots with Watson Services- (**IBM-EDX)**

**2018** Introduction to AI for Business

**2018** Artificial Intelligence A-Z™: Learn How To Build An AI

**2019** Data Science A-Z™: Real-Life Data Science

**2016** Functional Near Infrared Spectroscopy- **(HITACHI)**

**2015** Quantitative Electroencephalogram (EEG) Analysis:Methods and Clinical Applications**- (Universiti Teknologi Malaysia)**

**2013** NeuroInformatics**- (Cuban Neurosciences Center (CNEURO))**

**2013** Brain and Nervous System Anatomy**- (University Science Malaysia Hospital (HUSM))**

**2013** Biostatistics and statistical analysis- (**Universiti Teknologi PETRONAS)**

**2012** Pattern Recognition and classi\_cation: Methods and Applications- (**Universiti Teknologi PETRONAS)**

**Skills:**

* **Computer skills**: operating systems, MS office
* **Languages**: Native Arabic, fluent English.
* **Personal**: Self-motivated, meticulous and target oriented, strong interpersonal and communication skills, team worker, efficient under pressure.

**References**

To be made available upon request.