FACULTY CURRICULUM VITAE





Name: Dr. Majed Al Sarheed Rank: Assistant Professor of industrial Practice

Nationality:	Kuwaiti
AU Joining Date:	04 Jan 2015
E-Mail Address:	m.alsarheed@au.edu.kw

Professional Information

Education:	Qualification: Doctor of Philosophy (Ph.D.) Major: Mechanical Engineering College/University: Lehigh University (USA) Year: 2014/2015
	Qualification: Executive Leadership Training Major: Leadership and Management College/University: CORNELL UNIVERSITY, Johnson Graduate School of Management, Ithaca, NY (USA) Year: 2011
	Qualification: Master of Science in Engineering Major: Mechanical Engineering College/University: University of Pennsylvania (USA) Year: 2001
	Qualification: Bachelor of Science Major: Mechanical Engineering College/University: Widener University (USA) Year: 1998
Specialization:	Engineering Specialization : Design, Manufacturing, Control System Other Specialization : Entrepreneurship and Project Management Research Area : Manufacturing and Polymer Processing

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Current Academic Position:	Assistant Professor of industrial Practice
Current Professional Positions:	Founder & CEO – Advanced Industrial Manufacturing (AIM)
Previous Administrative Position Held:	Manager – Innovation and Entrepreneurship Center
Previous Academic Positions Held:	Lecturer
Fellowships And Honors:	SPE Excellence in Polymer Science & Engineering Award (November 2014) SPE ANTEC Award – PA chapter (April 2014) SPE ANTEC Award – PA chapter (March 2013)
Teaching Experience:	 AU – January 2015 – current: A full-time faculty member, responsible for teaching of Engineering and Entrepreneurship courses. Duties included Developing more than 5 courses in Engineering and Entrepreneurship Creating an Entrepreneurship program for all majors within the college Facilitating individual, group-based and work-based learning Teaching Engineering and Project –Based Learning courses to Degree and Diploma students. Participating in curriculum development of Engineering Courses Conduct research to maintain skills and knowledge. Lehigh University – Bethlehem, PA, USA Post-Doctoral Research Associate(12/2014 – 1/2015 & 5/2015 – 8/2015) Entrepreneurial Lead for the Innovation-Corps, a National Science Foundation (NSF) funded program, to advance research and to promote the translation of new ideas into the market place. Investigated the commercial feasibility of the technical project. Assisted in transitioning the technology from the lab into the market place. Teaching Assistant – Entrepreneurship Minor Program School of Business (1/2007–1/2009) Assisted in teaching an Entrepreneurship minor program at Lehigh University. Particular emphasis was placed on identifying and seizing entrepreneurial opportunities, creativity, innovation and vision



	- Teaching Assistant – ME-245 Engineering Vibrations:
	Physical modeling of vibrating systems. Free and forced single and
	multiple degree of freedom systems. Computer simulations and
	engineering applications
Industrial And	Advanced Industrial Manufacturing (AIM)
Technical	First Wood-Plastics Composite materials manufacturer in Kuwait
Experience:	Founder & CEO (2017 – Current)
	 Developed and executed business strategies and objectives to achieve sustainable growth. Since its inception, AIM has maintained a strong year-over-year revenue growth Built a team of successful and highly motivated technical and business executives to lead sales and marketing Ensured team building was integrated within ongoing business strategy to increase efficiency and performance
	 Created and instilled vision and inspired innovation to encourage employees
	 Implemented policies and codes of conducts to ensure full compliance and the highest level of work ethics, integrity and transparency
	 Allocated and managed budgets. Analyzed, evaluated and distributed budgets to various projects to improve cash flow
	• Developed and introduced over 25 new products to the market
	 Responsible for market research, competitor and customer analysis to mitigate risk and ensure high rate of return on investments
	NOORTEK LLC, Emmaus, PA
	Aircraft Components Supplier Founder & Managing Director (01/2008 – 09/2012)
	Representing International Aerospace companies in pursuit of potential business opportunities in the Middle East & North Africa, maintaining primary focus in the aerospace industry.



- Developed and executed business strategies and objectives to achieve sustainable growth
- Built a team of successful and highly motivated business development representatives to lead sales and marketing in designated territories/countries.
- Advised clients/partners concerning potential opportunities, existing regional customs, laws, regulations, culture sensitivity rules and public policies

TransDigm Group Inc. (Formerly BREEZE-EASTERN Corp.), Union, NJ (USA)

Marketing Consultant, Middle East/North Africa (1/2007 – 5/2013)

- Analyzed target markets, attended trade shows and took action to maximize business revenue streams, ensuring proper representation of company brand and values
- Developed and executed a business plan and marketing strategies and objectives to achieve a strong business development
- Established relationships with countries in the Middle East in general and in the Gulf region in particular such as Kuwait, United Arab Emirates (UAE), Qatar, Bahrain, Oman and Saudi Arabia
- Performed contract negotiation and logistics support with the several Governments, which resulted is securing multi-million dollars opportunity and first time presence in the middle-east region
- Facilitated communications between potential customers and client and submit proposals and presentations to potential customers, including preparation of bid responses and contract proposals and language translation of correspondence as required
- Advised client concerning potential opportunities, existing regional customs, laws, regulations, culture sensitivity rules and public policies



Project Engineer - (3/2004-1/2007)

Responsible for overall design, development and prototyping of equipment while keeping projects on schedule and within budget. Created test plans, developed testing procedures, executed tests and prepared test reports. Coordinated with customers on product specifications and design changes.

- Project Manager responsible for leading design, development and delivery of Cargo Winch System for the Airbus Military A400M program
- Submitted design proposal for anchor cables and support arms for the Airbus Military A400M Retrieval Winch System. Design enables paratroopers to safely deplane aircraft through use of static lines and also supports cargo delivery. Program awarded
- Program Manager for the development of an 8HP 270V DC Brushless Motor to be used for Breeze-Eastern High-Speed Hoist (Model HS-29900).

Sr. Design Engineer – TELEFLEX (04/2003 – 12/2003)

Participated in multiple projects, providing hands-on support in machine shop, coordinating testing and interfacing with vendors and customers.

- Designed a retrofit to upgrade adjustable pedal systems to include an enhanced DC motor and a memory sensor, leading to the introduction of a new product to the Teleflex pipeline
- Replaced existing gear shift control Neutral switch mechanism with more efficient and cost-effective design, leading to improved customer satisfaction and enhanced product safety

MOTOROLA, INC., Horsham, (04/2000 – 07/2001)

Mechanical Engineer – Broadband Communications Sector Performed mechanical design of broadband radio frequency and fiberoptic distribution and head-end equipment from concept to production. Qualified vendors by negotiating and confirming parts availability, manufacturing schedules and purchasing costs.

• Improved product quality with zero cost increase through substitution of better materials



	 Designed molded, machined and sheet metal parts, utilizing PRO/ENGINEER to facilitate fast and accurate production of design documents
	• Supported design development in all phases, performing thermal, stress and failure analyses using manual calculation and PRO/MECHANICA to ensure highest standard of quality
	EATON CORPORATION, Glenolden, PA (USA)
	Design Engineer – Aerospace Controls Unit (06/1998 – 03/2000)
	Managed multiple projects from conception to delivery, providing hands-on support in machine shop and assembly floor, coordinating testing and interfacing with vendors.
	• Supervised design and analysis for 7 mechanical and electro- mechanical product lines for oil monitoring systems, generating proposal, assembly and detail drawings ahead of schedule
	 Analyzed design issues including stress, strength, failure, thermal FEA, controls and vibration identifying weaknesses and recommending design optimization
	 Completed design of oil debris collection systems including chip detectors, chip collector, breather, sight gauges, filler caps, float switches and high temperature oil level sensors to provide maximum capture efficiency of oil debris in the turbo-jet engine gear box
	• Developed computer programs to analyze O-ring frictional forces, gland properties and to design springs, improving design accuracy and reducing time spent on repetitive.
Research Interest:	Engineering Design, Manufacturing, and Control
	Product Development
	Entrepreneurship
	Polymer Processing
Research Grants:	NA
Research and	Book Chapter:
Publications including	Zahalawi I Toglaw S. Alsarheed M. (2020) The Role of Faculty Members in
Iournal and Books	Building an Entrepreneurshin Culture in Higher Education: The Case of the
Journal and Books.	Australian University In: Badran A Baydoun F Hillman I (eds) Higher
	Education in the Arab World, Springer, Cham, https://doi.org/10.1007/978-
	3-030-37834-9_15
	Journal:



	 "Computational Study of Ailerons in Cross Flows, Ground Effects and Biplanes Configurations," Journal of Aeronautics & Aerospace Engineering, (2016) "Performance Evaluation of MHD Power Plant at Optimal Operating Conditions," International Journal of Energy, Environment, and Economics, Volume 23 Issue 2 (2016). "Multivariable Model-Based Shape Control for the National Spherical Torus Experiment (NSTX)," Fusion Engineering and Design Journal, 86, (2011) 1107-1111
	Conference Proceedings:
	 "Development of An Integrated Melt Modulation System To Manipulate Cold-Runner Injection Molding Processing Parameters And Their Effect On Final Product Physical And Optical Properties" Proceedings of the 12th Manufacturing Science and Engineering Conference, (MSEC2017), Los Angeles, California, USA, June 2017.
	2. "Problem Based Learning (PBL) And Entrepreneurship," PBL Symposium Proceedings, Australian University, March 2016
	3. "Experimental Results of Melt Modulation Packing Parameters Control on Cold-Runner Injection Molding Final Product Quality," SPE-ANTEC Technical Papers (2015).
	4. "Investigation of Melt Modulation Control and Its Effect on Cold-Runner Injection Molding Packing Parameters and Final Product Quality," SPE- ANTEC Technical Papers, (2014).
	5. "Investigation of Cold-Runner Injection Molding Processing Parameters Manipulated by Melt Modulation and Their Effects on Product Optical Properties." SPE-ANTEC Technical Papers. (2013).
	 6. "Multivariable Multi-Model-Based Magnetic Control System for The Current Ramp-up Phase in the National Spherical Torus Experiment (NSTX)," IEEE 50th Conference on Decision and Control and European Control Conference, (2011)
	 "Multivariable Model-Based Shape Control For The National Spherical Torus Experiment (NSTX)," 26th Symposium on Fusion Technology, Porto, Portugal, September 26 – October 1, 2010
Paper Presentations at	1. "Development of An Integrated Melt Modulation System To Manipulate
Professional	Cold-Runner Injection Molding Processing Parameters And Their Effect On
Conferences:	Final Product Physical And Optical Properties" Proceedings of the 12th
	Manufacturing Science and Engineering Conference, (MSEC2017), Los
	Angeles, California, USA, June 2017.
	2. "Problem Based Learning (PBL) And Entrepreneurship," PBL Symposium
	Proceedings, Australian University, March 2016
	3. Experimental Results of Melt Modulation Packing Parameters Control of Cold-Rupper Injection Molding Final Product Quality "SPE-ANTEC Technical
	Papers (2015)
	4. "Investigation of Melt Modulation Control and Its Effect on Cold-Runner
	Injection Molding Packing Parameters and Final Product Quality," SPE-
	ANTEC Technical Papers, (2014).

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	5. "Investigation of Cold-Runner Injection Molding Processing Parameters
	Manipulated by Melt Modulation and Their Effects on Product Optical
	Properties," SPE-ANTEC Technical Papers, (2013).
	6. "Multivariable Multi-Model-Based Magnetic Control System for The Current
	Ramp-up Phase in the National Spherical Torus Experiment (NSTX)," IEEE
	50th Conference on Decision and Control and European Control
	Conference, (2011)
	7. "Multivariable Model-Based Shape Control For The National Spherical Torus
	Experiment (NSTX)," 26th Symposium on Fusion Technology, Porto,
	Portugal, September 26 – October 1, 2010
University Service	- Mechanical Engineering Department CURRICULUM Committee
including committee	- Mechanical Engineering Department PBL Committee
Membership:	- Mechanical Engineering Department Students Appeal and Complaint
	Committee
	- Mechanical Engineering Department LABS AND WORKSHOP Committee
National Service:	NA
University	Member of College of Engineering PBL Committee
Committees:	