Ibrahim Abdulrahman Aljamaan

Assistant Professor

Personal Data:

Department | Biomedical Engineering.

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Academic Qualifications:

Date	Academic Degree	Place of Issue	Address
06/2016	PhD in Electrical Engineering (Control Systems).	University of Calgary.	Canada.
08/2011	MSc in Electrical Engineering (Control Systems).	University of Calgary.	Canada.
06/2005	B.S. in System Engineering (Instrumentation and Control).	King Fahd University of Petroleum and Minerals (KFUPM).	Saudi Arabia.

Professional Record:

Job Rank	Place and Address of Work		Date	
Assistant Professor	Imam Abdulrahman Bin Faisal University.	Dammam, Saudi Arabia.	01/2017	Now
Project engineer	Invensys (Triconex).	Alkhobar, Saudi Arabia.	12/2005	04/2008
Instrument Engineer	PI-Consult.	Alkhobar, Saudi Arabia.	09/2005	12/2005

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Nonlinear Closed-Loop System Identification In The Presence Of Non-stationary Noise Sources.
Master	Nonlinear Identification of Two Different Closed-Loop Models Using Separable Least Squares Methods.

Administrative Positions Held:

Administrative Position	Office	Date
Environental Engineering Department Heead.	Environental Engineering Department.	2021-present
General Manager.	The experties house (Integrated Environmental Solutions and Consultance Office).	2021-present
General Manager.	The experties house (University Pioneer Consultants for Integrated Engineering Solutions).	2020-present
Vice Dean Of Academic Affairs.	College of Engineering.	2017-2019

Scientific Achievements

Published Refereed Scientific Research

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
1	**I. Aljamaan** and Ahmed Alenany	Identification of Wiener Box-Jenkins Model for Anesthesia Using Particle Swarm Optimization	Applied Sciences. 10 May, 2022
2	**Ibrahim A. Aljamaan** and Ibraheem Alnaib.	Prediction of Blood Glucose Level Using Nonlinear System Identification Approach	IEEE Access. 30 Dec. 2021
3	**Ibrahim A. Aljamaan**, Mujahed M. Al-Dhaifallah and David T. Westwick.	Hammerstein Box-Jenkins System Identification of the Cascaded Tanks Benchmark System	Hindawi, Mathematical Problems in Engineering, 28 February 2021.
4	S.I. Alzahrani, **I. A. Aljamaan** and E.A. Al-Fakih	Forecasting the spread of the COVID-19 pandemic in Saudi Arabia using ARIMA prediction model under current public health interventions	Journal of infection and public health, 1 July 2020.

Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	**Ibrahim A. Aljamaan**, Amjad M. Amtealeq, Ayman M. Aljumaia, Mohammed A. Hashim and Mohammed Y. bin Alshaikh.	Prototype of Automated Specimens System	The 20th IEEE International Multi-Conference on Systems, Signals and Devices SSD Conference, July 2023.
2	**Ibrahim A. Aljamaan.**	Nonlinear System identification of Cortical Response in EEG Elicits by Wrist Manipulation.	The17th International Multi-Conference on Systems, Signals &Devices (SSD), July 2020.
3	Njood Alzuabi, Maysam Alfaddagh, Galyah Alhamid, Ghadah AlHamad and **Ibrahim A. Aljamaan.**	Continuous Non-Invasive Blood Pressure Monitoring Device.	The 8th International Conference on Modeling Simulation and Applied Optimization (ICMSAO), April 2019.
4	**I. Aljamaan**, D. Westwick, and M. Foley.	Identification of Wiener Models in the Presence of ARIMA Process.	The 11th IFAC Symposium on Dynamics and Control of Process Systems , including Biosystems, June 2016.
5	**I. Aljamaan**, D. Westwick, and M. Foley.	Non-linear closed-loop identification of CSTR in the presence of nonstationary disturbances.	The 17th IFAC Symposium on System Identification, SYSID, 2015.
6	**I. Aljamaan**, D. Westwick, and M. Foley.	Prediction Error Identification of Hammerstein Models in the Presence of ARIMA Disturbances.	The IEEE MultiConference on Systems and Control (MSC), 2014.
7	**I. Aljamaan**, D. Westwick, and M. Foley.	Non-Iterative Identification of IIR Wiener Systems with NonInvertible Nonlinities.	The IFAC World Congress Conference, 2014.
8	**I. Aljamaan**, D. Westwick, and M. Foley.	Non-Iterative Identification of IIR Wiener Systems with NonInvertible Nonlinities.	The IFAC International Workshop on Adaptation and Learning in Control and Signal Processing, July 2013.

| 9 | **I. Aljamaan**, A. Bu bshait, D. Westwick. | Separable Least Squares Identification of Wiener Box-Jenkins Models. | The 18'th IFAC Triennial World Congress, 2011. |

Current Projects:

#	Research Title	Name of Investigator(s) Extent of Contribution
1	Design and implementation of economical Automated Peritoneal Dialysis Machine	**Ibrahim Aljamaan**, Sajid Ali Khan Zada, Abdullah K. Al-Hwiesh, Saleh Ibrahim Alzahrani, Gameel Saleh Mohammed and Ibraheem Alnaib.
2	Development of novel non-invasive systems for the characterization of the blood glucose levels.	Ibraheem Al-Naib, Murad Althobaiti, MahbubunnabiTamal, **Ibrahim Aljamaan**, Gameel Saleh, Ijlal Ateeq, Maha Alshammari, and Bushra Alsunaidi
3	Robotic Arm Control Using Artificial Intelligent Techniques	**Ibrahim Aljamaan** and Kamran Hameed.
4	An integrated approach with in vivo molecular imaging and machine learning to characterize tissue microenvironment for accurate diagnosis and prognosis of infection, inflammation and cancer.	Mahbubunnabi Tamal, **Ibrahim Aljamaan,** Ibraheem Al-Naib, Gameel Saleh, Christopher J Cawthorne, Rafidah Zainon, Ibrahim Al-Jammaz and Ahmed Maarouf.

Membership of Scientific and Professional Societies and Organizations
- IEEE
- ISA

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Control Systems for BME.	BIOEN 541	Lecturer
2	Biomedical Digital Signal Processing.	BIOEN 513	Lecturer
3	Biomedical Instrumentation Design.	BIOEN 432	Lecturer
4	Digital Design.	ENG 451	Lecturer
5	Technical Writing.	ENG 401	Lecturer
6	Electronics Devices and circuits.	ENG 322	Lecturer
7	Environmental Impact Assessment EIA	ENVEN 503	Lecturer

| 8 | Seminar I (Master course) | BMEN 695 | Lecturer |
| 9 | Applied Probability and statistics for Engineers (Master course) | BMEN 602 | Lecturer |

Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	From	To
1	BIOEN 531: Senior Design Project-I.	Coordination	Co-coordination	Undergrad.	2017	present
2	BIOEN 532: Senior Design Project-II.	Coordination	Co-coordination	Undergrad.	2018	present
3	ENVEN 521: Senior Design Project I.	Coordination	Co-coordination	Undergrad.	2019	Present
4	ENVEN 522: Senior Design Project II.	Coordination	Co-coordination	Undergrad.	2020	Present

Student Academic Supervision and Mentoring

#	Level	Number of Students	From	To
1	Undergraduate	50	2017	present
2	Master	2	2023	Present

Administrative Responsibilities, Committee and Community Service

Administrative Responsibilities

#	From	To	Position	Organization
1	2017	2019	Head of the Engineering Students club	IAU
2	2022	Present	Head of the community service committee at the Biomedical	IAU

			Engineering Department.	

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	MATLAB
2	C++
3	LabView