

AHMAD JOBTRAN AL-MAHASNEH

Assistant Professor in Mechatronics engineering at Philadelphia university

@ almahasneh87@gmail.com +962787232270 Philadelphia university, Amman, Jordan, P.O.Box: 19392
Amman, Jordan https://scholar.google.com/citations?user=7i_CuUUAAAAJ
ahmad-jobtran-al-mahasneh-37493321 ahmadjordan



EXPERIENCE

Teaching assistant

JUST

2011-2013 JUST, Irbid, Jordan

- Marking and teaching classes and labs such as engineering drawing, fluid and thermo lab and strength of material lab.

Casual academic

UNSW Canberra

2016-2018 Canberra, Australia

- Marking classes such as flight dynamics.

PROJECTS

Bio-inspired control systems

DSTG Australia

2016-2018 UNSW Canberra

- Development of neural controller for hexacopter and flapping UAVs in both software and hardware.

Mining symbolic models of solar systems

Honda Europe research institute and UNSW Canberra

2020 UNSW Canberra

- Symbolic modeling of photovoltaic systems from recorded data.

MEMBERSHIPS

- Member of the IEEE since 2016.
- Member of the IEEE Control Systems Society.
- Member of the IEEE Systems, Man, and Cybernetics Society.
- Regular reviewer at high quality journals such as IEEE Transactions on Systems, Man, and Cybernetics: Systems, IEEE Transactions on Industrial Informatics, ISA transaction and IEEE Transactions on Cybernetics.

MY LIFE PHILOSOPHY

"Engineers like to solve problems. If there are no problems handily available, they will create their own problems." S.A

MOST PROUD OF



Getting PhD

in mechanical engineering from world class university UNSW Australia.



Publishing high quality journals

publishing in IEEE TSMC and IEEE TII.

STRENGTHS

Hard-working

Problem solver

Task oriented

C++

Intelligent Systems

MATLAB

Python

Nonlinear Systems

Adaptive and evolving systems

Data-driven modeling

Data-driven control

Neural networks

Fuzzy logic

LANGUAGES

Arabic



English



EDUCATION

Ph.D. in Mechanical/Mechatronics

UNSW Australia

July 2016 – March 2020

Thesis title: Evolving neural networks for modeling and control of dynamic systems.

M.Sc. in Mechanical/Mechatronics

JUST Jordan

Sept 2011 – June 2014

SELECTED PUBLICATIONS

Books

- Al-Mahasneh, Ahmad Jobran, Sreenatha G Anavatti, Matthew A Garratt, and Mahardhika Pratama (2018a). *Applications of General Regression Neural Networks in Dynamic Systems*. IntechOpen.

Journal Articles

- Al-Mahasneh, Ahmad Jobran, Sreenatha G. Anavatti, and Matthew A. Garratt (2019). "Self-Evolving Neural Control for a Class of Nonlinear Discrete-Time Dynamic Systems with Unknown Dynamics and Unknown Disturbances". In: *IEEE Transactions on Industrial Informatics*.
- Al-Mahasneh, Ahmad Jobran, Sreenatha G. Anavatti, Matthew A. Garratt, and Mahardhika Pratama (2019). "Stable Adaptive Controller Based on Generalized Regression Neural Networks and Sliding Mode Control for a Class of Nonlinear Time-Varying Systems". In: *IEEE Transactions on Systems, Man, and Cybernetics: Systems*.
- Al-Mahasneh, Ahmad Jobran, Sreenatha G Anavatti, and Matthew A Garratt (2018b). "Review of Applications of Generalized Regression Neural Networks in Identification and Control of Dynamic Systems". In: *arXiv preprint arXiv:1805.11236*.
- Al-Mahasneh, Majdi et al. (2014). "A generic method for determining moisture sorption isotherms of cereal grains and legumes using artificial neural networks". In: *Journal of food process engineering* 37.3, pp. 308–316.

Conference Proceedings

- Al-Mahasneh, Ahmad Jobran, Sreenatha G. Anavatti, and Matthew A. Garratt (2018a). "Altitude identification and intelligent control of a flapping wing micro aerial vehicle using modified generalized regression neural networks". In: *Computational Intelligence (SSCI), 2017 IEEE Symposium Series on. IEEE*, pp. 2302–2307.
- Al-Mahasneh, Ahmad Jobran, Sreenatha G Anavatti, Matthew A Garratt, and Mahardhika Pratama (2018b). "Evolving General Regression Neural Networks using Limited Incremental Evolution for Data-Driven Modeling of Non-linear Dynamic Systems". In: *2018 IEEE Symposium Series on Computational Intelligence (SSCI)*. IEEE, pp. 335–341.
- Al-Mahasneh, Ahmad Jobran, SG Anavatti, and M Garratt (2017). "Nonlinear multi-input multi-output system identification using neuro-evolutionary methods for a quadcopter". In: *Advanced Computational Intelligence (ICACI), 2017 Ninth International Conference on. IEEE*, pp. 217–222.
- Al-Mahasneh, Ahmad Jobran, Sreenatha G Anavatti, and Matthew A Garratt (2017). "The development of neural networks applications from perceptron to deep learning". In: *2017 International Conference on Advanced Mechatronics, Intelligent Manufacture, and Industrial Automation (ICAMIMIA)*. IEEE, pp. 1–6.

The full publications list is at https://scholar.google.com/citations?user=7i_CuUUAAAAJ

B.Sc. in Mechanical/Mechatronics

JUST Jordan

 Sept 2005 – February 2010

REFEREES

Dr. Sreenatha Anavatti

 UNSW Canberra

 Northcott Dr, Campbell, Canberra, ACT 2612, Australia

a.sreenatha@adfa.edu.au

Prof. Matthew Garratt

 UNSW Canberra

 Northcott Dr, Campbell, Canberra, ACT 2612, Australia

M.Garratt@adfa.edu.au