Lina Elsherif Ismail

Emails: lina.elsherif@gmail.com ; linaelsherif@knights.ucf.edu
TEl:(+20) 1008005480

PERSONAL INFORMATION

last name: Ismail
Middle name: El-Sherif
First name: Lina
Position: Assistant Processor in the Industrial Engineering at the department of Industrial and Management Engineering (IME) at the Arab Academy for Science, Technology, and Maritime Transport
PhD. From the University of Central Florida, USA,
Department of Industrial Engineering and Management system,
College of Engineering
Orlando, Florida.
Mobile: +201008005480
E-mail1: lina.elsherif@gmail.com
E-mail2: linaelsherif@knights.ucf.edu
Skype: Lina Ismail
Gender: Female
Date of Birth: December 23, 1989
Place of birth: Alexandria, Egypt.
Marital Status: Married
Country of Origin: Egypt
Present Nationality: Egyptian
Languages and Fluency Level: English (Fluent)
Arabic (Fluent)
French (Basic)

PROFESSIONAL SUMMARY

Lina is an assistant professor in the Industrial and Management Engineering Department in the Engineering College at the Arab Academy for Science, Technology, and Maritime Transport, Egypt. She earned her Ph.D degree in May 2021 from the Industrial Engineering and Management Systems program in the college of Engineering and Computer Science at the University of Central Florida, USA. Her research expertise in neuroergonomics which applies techniques from neuroscience and methods from computer science to the human factors and ergonomics area to study the human brain activity at work. She focused on evaluating the neurophysilogical data at physical acttivity to enhance the workplace design and maximize the workers' physical and mental well-being. This area of research aims to expand the understanding of the neural mechanisms underlying human perceptual, cognitive, and motor functioning with a focus on real-world contexts. Particularly, she investigated how different force exertion levels affect the functional connectivity patterns and network topological properties using advanced computational methods and a graph theoretical approach. She has collected the brain data using a non-invasive brain device known as electroencephalogram. Her research findings enhanced the understanding of the neurophysiological basis of physical exertions.

Lina holds B.S. and M.S. in Industrial and Management Engineering from Arab Academy for science and technology, Alexandria, Egypt. Her final year graduation project for the Bachelor's degree was in the product design and development area, where she applied different industrial engineering processes to identifying the market needs and developing novel solutions with real users. During her master's degree, she gained a good experience in the additive manufacturing technology by modelling the stereolithography process parameters to minimize the building time and maximize the product quality. Lina has a 9 years of extensive experience in teaching different Industrial Engineering undergraduate courses. During the past time frame, she has gained a very good experience in laboratory works, exam mentoring, and full responsibility in preparing course material. She is a dedicated partner to university programs and outreach events that help promote learning and support the community. For instance, she has a prior commitment to help in administrative work including accreditations, certificates, trainings courses and organization conferences. She has a strong philosophy of teaching aiming to help student's improve performance by applying different methods to motivate students. Her career goal is to conduct high-quality research in different areas while teaching undergraduate and graduate courses.

EDUCATION

• **Ph.D in Industrial Engineering and Management systems** College of Engineering – Department of Industrial Engineering and Management systems - University of Central Florida, USA, Orlando, Florida Advisor: Professor Waldemar Karwowski Research area: Investigates the human brain in relation to behavioral performance in everyday settings. The research aims to expand the understanding of the neural mechanisms underlying human perceptual, cognitive, and motor functioning with a focus on real-world contexts. GPA:3.972/4	**August 2017- May 2021**
• **MSc. in Industrial and Management Engineering** Department of Industrial and Management Engineering, College of Engineering and Technology. Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt. Advisor: Mootaz Ghazy Thesis: Modeling stereolithography process parameters using system dynamics GPA:4/4	**September 2012- July 2015**
• **B. Sc. Industrial and Management Engineering** Department of Industrial and Management Engineering, College of Engineering and Technology. Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt. Advisor: Professor Khaled El-kilany Project: Product design and development GPA:3.972/4	**September 2007- July 2012**

EXPERIENCE

1. Asistant Professor at the Department of Industrial and Management Engineering, College of Engineering and Technology in the Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt.	**July 2021- till date**
2. Teaching Assistance and Research Assistant at computational Neuroergonomics laboratory **Supervisor: Professor Waldemar Karwowski** - Department of Industrial Engineering and Management systems, College of Engineering, University of central Florida	**August 2017- May 2021**
3. Teaching Associate and Research Assistant at additive manufacturing lab **Supervisor: Mootaz Ghazy** - Department of Industrial and Management Engineering, College of Engineering and Technology Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt.	**July 2015 -July 2017**
4. Graduate Teaching Assistant **Supervisor: Professor Khaled El-kilany** - Department of Industrial and Management Engineering, College of Engineering and Technology. Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt.	**September 2012- July 2015**

RESEARCH AREAS AND TEACHING EXPERIENCE

- **Research Interests**

Neuroergonomics
Human factors and ergonomics
Signal processing
Brain connectivity
Complex modelling techniques
Advanced Manufacturing Systems
Industrial safety
Quality control and total quality management
Lean six sigma

- **Teaching Interests**

Research Methodology
Operation Research
Cognitive Ergonomics
Human Factors in Engineering Systems
Human Error and Complex System Failures
Measure and Design of Work
Engineering Safety
Occupational and Safety Management
Industrial Facilities Planning
Engineering Statistics

Design of Experments
Engineering Reliability
Quality Control and Design
Lean Six Sigma
Production Planning and Distributed Systems

PUBLICATIONS

- PhD Dissertation

Topological Changes In The Functional Brain Networks Induced By Isometric Force Exertion Using A Graph Theoretical Approach: An Eeg-Based Neuroergonomics Study, Ph.D dissertation, 2021.

- MSc Thesis

Modelling Stereolithography Process Parameters Using System Dynamics, M.Sc. Thesis 2015.

- Conference Papers

Lina Elsherif, Mootaz M. Ghazy, and Khaled S. El-Kilany, "Modelling Stereolithography Process Parameters using System Dynamics", Istanbul/ Turkey, pp. from 1188-1200, 2014

- Journal Papers

Ismail LE, and Karwowski W. “Applications of EEG indices for the quantification of human cognitive performance: A systematic review and bibliometric analysis”. PLoS One. 2020 Dec 4;15(12):e0242857. doi: 10.1371/journal.pone.0242857. PMID: 33275632; PMCID: PMC7717519.

Ismail, Lina Elsherif, and Waldemar Karwowski. "A Graph Theory-Based Modeling of Functional Brain Connectivity Based on EEG: A Systematic Review in the Context of Neuroergonomics." IEEE Access 8 (2020): 155103-155135.

Lina Ismail, Waldemar Karwowski1, Peter Hancock and Taiar Redha. “Applications of EEG Indices for the Quantification of human physical performance” (under review).

PROFESSIONAL SKILLS

- Human machine interface
- Human factors engineering
- Usability/human centered design
- Ergonomics
- Neuroergonomics
- Industrial engineering
- Task analysis and modelling
- Team working
- Excellent communication skills (written and verbal)
- Excellent oral and written communication skills, including presentation, and facilitation skills
- Demonstrated pro-activeness and problem-solving skills
- Advanced computer skills including spreadsheet, word processing, and specialized applications as:
  Signal analysis

- EEGLAB
- Brain Connectivity toolbox
- eLORETA
- Brain net viewer
- Brain connectivity toolbox

Programming and graphics

- Python
- Matlab
- Vos viewer

Statistical analysis

- SAS
- SPSS
- Minitab

Simulation

- Extend sim simulation package
- Vensim Dynamic causal modelling

SCHOLARSHIPS, HONOURS & AWARDS

- **Scholarships**

- PhD full assistantship at the University of Central Florida (2017-2021)
- Masters full assistantship at the AASTMT (2012-2015)
- Bachelor full assistantship at the AASTMT (2007-2012)

- **Honours and awards**

- Honour award by ASQ at UCF as a member for organizing the ASQ annual conference at UCF (2018)
- Recognition award by the College of Engineering and Technology, Arab Academy for Science and Technology for NAQAAE Accreditation in March 2014.
- Annual Undergraduate Student Award – AASTMT 2012
- Annual Undergraduate Student Award – AASTMT 2011
- Annual Undergraduate Student Award – AASTMT 2010
- Annual Undergraduate Student Award – AASTMT 2009
- Annual Undergraduate Student Award – AASTMT 2008

PROFESSIONAL & SOCIETIES MEMBERSHIP

- Member in the Institute of Industrial Engineers (IIE)
- Member in the American Society for Quality (ASQ)

WORKSHOPS & COURSE

Attended the following professional workshops that help in building the skills needed to plan and successfully implement educational outcomes assessment processes. Also, to complete

the various requirements of the National Authority for Quality Assurance and Accreditation of Education.

- **Six Sigma green belt,** September 2021-till date
- **Python Course,** October 2020-December 2020
- **Virtual ERP Boot Camp;** 2 days by June 2020
- **MATLAB Software;** April 2020 -May 2020
- **Online EEGLAB Workshop;** January 2020-April 2020
- **Academic Integrity Training** workshop, 1-day workshop by September 2018
- **Intellectual property rights;** 1 day workshop by February 2018 by John Miner
- **Authorship, credit and collaborative scholarship;** 1 day workshop by January 2018
- **Endnote and rework (citation management tools);** 1 day workshop by January 2018
- **Data management;** 1 day workshop by January 2018
- **YELLOW BELT SIX SIGMA WORKSHOP**; 1 day workshop by November 2017
- **R programming,** June 2016
- **NX software;** 7 days workshops by July 2015
- **System dynamics Software for Dynamic modelling,** by July 2014
- **Lean manufacturing workshop**; 2 days workshops by August; 2013.

CERTIFICATES

- At-Risk- for university and college faculty and staff certificate
- CITI Program certificate in Human Research (Social / Behavioural Research Investigators and Key Personnel), 13th of January 2021
- CITI Program certificate in Responsible Conduct of Research for Engineers (RCR), 13th of January 2021
- Yellow belt certificate from ASQ at UCF.
- R programming certificate from coursera.

Practical Training

1. Welding and forming at Alex welding, Alexandria, Egypt Summer Intern	**July 2010-August 2010**
2. Elsherif dying and textile Factory, Alexandria, Egypt Implementing lean manufacturing tools and facility layout on the production floor	**July 2008-September 2008 and July2009-September 2008**

PARTICIPATION CONFERENCES

Attended and/or presented paper in the international conference

- The 3rd International Neuroergonomics digital Conference at udwig-Maximilians-Universität München, München, Germany, September 11-16, 2021
- The 2nd International Neuroergonomics Conference at Drexel University, Philadelphia, USA, June 27-29, 2018
- International Conference on Computers and Industrial Engineering 2014 (CIE'44) and 9th International Symposium on Intelligent Manufacturing and Service Systems 2014 (IMSS'14), 14-16 October 2014, Istanbul, Turkey

Volunteer in the International conference

- 9th International conference on Applied Human Factors and ergonomics From July 21-25, 2018
- Engineering lean and six sigma conferences (IISE) From September 25-27, 2017

Vertual Webinar

- Neuroergonomics Webinar #1: Frontiers in Neuroergonomics, Oct 16, 2020
- Neuroergonomics Webinar #2: Frontiers in Neuroergonomics, January 2021

HOBBIES AND INTERESTS

Outside of my professional skills, I also like reading about nutrition. I care for living healthy life by eating healthy food and practicing sports including cardio exercise and yoga for meditation. I have been in the Egyptian Squash national team representing my country in many local and international tournament for more than 10 years.

REFERENCES

Provided upon request