C.V

Mohammed Hatem Alhaag

Assistant Professor in Human Factor Engineering and Safety

Home & Mailing Address: Industrial Engineering Department., College of Engineering,
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Google scholar: https://scholar.google.com/citations?hl=ar&user=rbxw4EMAAAAJ

Researchgate: https://www.researchgate.net/profile/Mohamed-Alhaag

Known Languages: Arabic and English (both perfect).

I. EDUCATIONAL QUALIFICATIONS

2017 – 3.Oct.2022:	Ph.D. in Industrial Engineering (**Human Factor Engineering and Safety**), King Saud University, Saudi Arabia, Grad Excellent, Cumulative GPA: 4.92/5. Thesis entitled" Evaluation of Augmented Reality in Maintenance and Assembly Task Training using Human Factor Approaches".
2012- 2016:	M.Sc. in Industrial Engineering, (**Human System Engineering**), King Saud University, Saudi Arabia. Grad Excellent, Cumulative GPA: 92.60%. Thesis entitled" Investigating the Effects of Watching 2D and 3D Displays from Different Distances on Visual Fatigue"
2005- 2010:	B.Sc. In Industrial and Manufacturing Systems Engineering, Taiz University, Taiz, Yemen. Grad very good, Cumulative GPA: 82.64%, ranking three.

II. AREAS OF INTERESTS

- Human Factors Engineering
- Advanced Ergonomics
- Safety Engineering
- Safety Systems and Accident Analysis
- Occupational Biomechanical
- Work Design and Analysis
- Design & Analysis of Experiments
- Operation Research 1&2
- Industrial Operation Management 1 &2
- Industrial Facility Planning, Design and Material Handling
- Product Design & Development

III. PROFESSIONAL EXPERIENCE

Teaching Experience:

2011- Now — Teaching Assistant in Ind. Eng. Dept., Faculty of Engineering, King Saud University.
Responsibilities include:
Teaching tutorials and labs for Occupational Biomechanics, Advanced Applications in Human Factors, Safety Systems and Accident Investigations, Experimental Design, Human Factors Engineering, Production Planning & Control, and Motion and Time Study.

Administration Works

2012-2016 — Member of the Practical Training Committee in the Industrial Engineering Department.

2016-2018 — Member of the Statistics and Information Committee in IndustrialEngineering Department.

2018-2022 — Member of the Accredation Committee in IndustrialEngineering Department.

Reviewer

Reviewer for International Journal of Industrial Ergonomics
Reviewer for IEEE Access Journal
Reviewer for Computer Journal

V. PUBLICATIONS:

A. Papers in Press

1. **Alhaag, M. H**.., Al-harkan, I. M., Alessa, F. M.., Ramadan, M. Z "Evaluation of the Cognitive Workload during Augmented Reality Interactions in Maintenance and Assembly Task," Journal of Manufacturing systems.

2. **Alhaag, M. H**.., Alessa, F. M., Al-harkan, I. M., Ramadan, M. Z "Evaluation of the Physical Stress Associated with Augmented Reality Interactions using Heart Rate Variability responses " IEEE Transactions on Multimedia Journal.

3. **Alhaag, M. H**.., Alessa, F. M., Al-harkan, I. M., Ramadan, M. Z "Fatigue and Activities of the Upper Arm and Neck Muscles during Augmented Reality Interactions" Journal of Industrial Information Integeration.

4. **Alhaag, M. H**., Al-harkan, I. M., Ramadan, M. Z, and Alessa, F. M. "Evaluation of the Short and Long Term Retention for the AR-Based Instruction with Different Maintenance Task Complexity," Applied Ergonomics Journal..

B. Paper Published in ISI Journals

1. **Alhaag, M. H**., Ramadan, M. Z., Al-harkan, I. M., Alessa, F. M., Alkhalefah, H., Abidi, M. H., & Sayed, A. E. (2022). Determining the fatigue associated with different task complexity during maintenance operations in males using electromyography features. *International Journal of Industrial Ergonomics*, *88*, 103273.
2. Ramadan, M. Z., Al-Tayyar, S. N., **Alhaag, M. H**., Soliman, A. T., & Abdelgawad, A. E. (2022). Evaluation of an ergonomically designed schoolbag: Heart rate variability and body discomfort rating. *Work*, (Preprint), 1-14.
3. **Alhaag, M. H**., Ghaleb, A. M., Mansour, L., & Ramadan, M. Z. (2021, November). Investigating the Immediate Influence of Moderate Pedal Exercises during an Assembly Work on Performance and Workload in Healthy Men. In *Healthcare* (Vol. 9, No. 12, p. 1644). MDPI.
4. Khalaf, T. M., Ramadan, M. Z., Ragab, A. E., **Alhaag, M. H**., & AlSharabi, K. A. (2021). Psychophysiological responses to manual lifting of unknown loads. *PloS one*, *16*(2), e0247442.
5. Ramadan, M. Z., Nasr, M. M., Dabwan, A. A., Khalaf, T. M., **Alhaag, M. H**., Soliman, A. T., & Abdelgawad, A. E. (2019). Evaluation of holding handheld scanner on muscle activity, heart rate variability, and model accuracy in industrial applications. *International Journal of Industrial Ergonomics*, *74*, 102873.
6. Ramadan, M. Z., & **Alhaag, M. H**. (2018). Evaluating the user physical stresses associated with watching 3D and 2D displays over extended time using heart rate variability, galvanic skin resistance, and performance measure. *Journal of Sensors*, *2018*.
7. Z. Ramadan, **M., H. Alhaag**, M., & Haider Abidi, M. (2017). Effects of viewing displays from different distances on human visual system. *Applied Sciences*, *7*(11), 1153.
8. **Alhaag, M. H.,** & Ramadan, M. Z. (2017). Using electromyography responses to investigate the effects of the display type, viewing distance, and viewing time on visual fatigue. *Displays*, *49*, 51-58.

C. Paper Published in Conferences Proceedings

1. **Alhaag, M. H**., Aziz, T., & Alharkan, I. M. (2015, March). A queuing model for health care pharmacy using software Arena. In *2015 International Conference on Industrial Engineering and Operations Management (IEOM)* (pp. 1-11). IEEE.
2. Alharkan, I. M., Aziz, T., & **Alhaag, M. H**. M. (2015, March). Minimization of earliness & Tardiness penalties with common due dates problem using Tabu search. In *2015 International Conference on Industrial Engineering and Operations Management (IEOM)* (pp. 1-12). IEEE.
3. **M.H. Alhaag** and Aziz, T (2013)"Minimizing Earliness and tardiness penalties with common due dates scheduling Problem "King Saud University Fourth Scientific Symposium.
4. **M.H. Alhaag** and Aziz, T (2013) "Research paper on "Simulating King Khalid University Outpatient Hospital Pharmacy" Fourth Scientific Conference - Mecca".

VI. HONORS AND AWARDS

- Obtained 5th position in King Saud University Tenth Scientific Symposium entitled in Research on " Lifting Unknown Weight Increases Physical and Mental Demand and May Lead to Fatigue and Injuries ".
- Obtained 5th position in King Saud University Fourth Scientific Symposium entitled in Research on "Minimizing Earliness and Tardiness Penalties with common Due Dates Scheduling Problem ".
- Obtained 4th position in Fourth scientific conference in Mecca" Simulating queuing system of King Khalid University hospital using Arena software".

VII. Skills

- **Computer Skills:**
  - **Application Programs:**
    - MS – Office (Word, Excel, PowerPoint, Access & Outlook).
  - **Computer Languages:**
    - MAT LAB Languages, C++, and Java Script
  - **Industrial Engineering Deign Programs:**
    - Solid work, AutoCAD, and Creo perimetric.
  - **3D Animation & Rendering**
    - Creo Illustrate
  - **Simulation Programs:**
    - Arena Software.
  - **Statistical Programs:**
    - Minitab software, SPSS software., and Easyfit software
  - **Signal Recording and Analyzing Programs:**
    - Megawin 3.1.1b software, Brain Viion Recordeer, and Analyzer 2
  - **AR and VR application development**
    - Vuforia Studio, Engine and Unity.
- **Personal Skills**
  - Great Verbal Communication
  - Good Commercial Awareness
  - Analyzing and Investigating Ability for problems and opportunity.
  - Initiative
  - Planning & Organizing
  - Decision-Making and Action Planning
  - Creative Leadership.

References:

References Available Upon request!