

## CURRICULUM VITAE

**Mohammed Walid Elbes**

*Department of Science/Faculty of Science and  
Information Technology,  
Al-zaytoonah University of Jordan, Amman, Jordan*

*Phone: 0798314584*

*Fax: N/A*

*E-mail: m.elbes@zuj.edu.jo*

*Homepage: <http://www.zuj.edu.jo/portal/mohammed-elbes/>*



### 1. Personal Data

Date of Birth: 04-01-1980  
Nationality: Jordanian

### 2. Education

- Ph.D. (Computer Science) 2012, Western Michigan University, Kalamazoo, MI, USA
- M.Sc. (Computer Science) 2008 Western Michigan University, Kalamazoo, MI, USA
- B.Sc. (Computer engineering) 2003, Jordan University of Science and technology irbid, Jordan.

### 3. Ph.D. Dissertation

- Title: "Rule-based precise localization services in mobile environments", Western Michigan University, Kalamazoo, MI, USA



QF11/0110 - 3.0E

Curriculum Vitae Form - Procedures of Faculty Transfer and Promotion

#### 4. Employment

##### Academic Positions

- Assistant Professor, Department of Computer Science, Al-zaytoonah University of Jordan, Amman, Jordan.  
February 11, 2013 – present.
- Instructor, Department of Computer Engineering, Jordan University of Science and Technology, Irbid, Jordan.  
1/7/2004 – 1/7/2007

##### Administrative Positions

- N/A

#### 5. Research Interests

Indoor localization, outdoor localization, IoT, Smart Cities, Smart Buildings, Vehicle To Vehicle Communication, Machine Learning and Deep Learning

#### 6. Membership in Scientific Societies and Associations

N/A

#### 7. Honors and Awards

- Best Student Award in the Computer Engineering Department 1999
- Excellence in Research Award at the Master level 2010
- Doctoral Excellence in Research Award 2011
- Outstanding Teaching Assistant Award 2011
- Bronze Paper Award, ITS-Michigan – Intelligent Transportation Society 2011

#### 8. Fellowships and Scholarships

- Scholarship from Alzaytoonah University of Jordan covering the PhD program in Western Michigan University. 2007-2012.
- Scholarship from WMU 2008-2011

#### 9. Teaching Experience

- *Graduate Courses*



QF11/0110 - 3.0E

Curriculum Vitae Form - Procedures of Faculty Transfer and Promotion

- ***Undergraduate Courses***

System programming, algorithms, network programming, C++, HCI, computer skills, E-Commerce

## 10. **Supervision of Graduate Research**

## 11. **Grants**

- 2017 - A novel indoor localization technique controlled by artificial intelligence for smart buildings (***In progress***)
- 2016 - Implementation of modified open source operating system for Alzaytoonah University of Jordan. Amman-Jordan (***Achieved***).
- 2014 - Affordable Smart Lighting Control Module with the Higher Council of Science and Technology in Cooperation with the European Union. Amman-Jordan (***Achieved***)
- 2011 - Trajectory Planning in Non-Autonomous Mobile Ad-Hoc Networks with Boeing Company. Michigan-USA (***Achieved***)
- 2012 - Quality of Ride assessment with the Michigan Department of Transportation (MDOT). Michigan -USA (***Achieved***)

## 12. **Patents**

N/A

## 13. **Membership of Committees**

- **University**
  - ***Computer center committee***

## 14. **Professional and Scientific Meetings**

***Scientific Meetings Organized***

***Participation in Scientific meetings***

- World Congress on IoT Barcelona , Spain 2018.
- Exams Building and Analysis, Alzaytoonah University of Jordan, Amman, Jordan, 2017.



QF11/0110 - 3.0E

Curriculum Vitae Form - Procedures of Faculty Transfer and Promotion

**15. Participation in or organization of curricular and/or extra-curricular activities**

N/A

**16. Publications****Journals:**

1. **M. Elbes**, Ahmad Alkhatib, Ala Al-fuqaha, Junaid Qadir “Using Phase Shift Fingerprints and Inertial Measurements in Support of Precise Localization in Urban Areas”, Personal And Ubiquitous Computing (PAUC), DOI: <https://doi.org/10.1007/s00779-019-01227-y>, **2019**.
2. **M. Elbes** T. Kanan , S. Alzubi, Al Alfuqaha, B. Hawashin” A Survey on Particle Swarm Optimization with Emphasis on Engineering and Network Applications “ Evolutionary Intelligence, DOI<https://doi.org/10.1007/s12065-019-00210-z> **2019**
3. Shadi AlZu’bi1, Sokyna AlQatawneh, **Mohammed Elbes**, Mohammad Alsmirat, “Transferable HMM probability matricesin Multi-Orientation Geometric Medical Volumes Segmentation” Concurrency and Computation: Practice and Experience journal, Accepted in Feb. **2019**.
4. Hawashin B., Aqel D., Alzubi S., **Elbes M.**, “*Improving Recommender Systems Using Co-Appearing and Semantically Correlated User Interests*”. Recent Patents on Computer Science. Accepted in Jan. **2019**.
5. S AlZu’bi, Y Jararweh, H Al-Zoubi, **M Elbes**, T Kanan, B Gupta Multi-orientation geometric medical volumes segmentation using 3D multiresolution analysis Multimedia Tools and Applications, 1-26 **2018**
6. **M Elbes**, A Al-Fuqaha, M Anan, “A precise indoor localization approach based on article filter and dynamic exclusion techniques”, Network protocols and algorithms 5 (2), 50-71 14 **2013**
7. **M Elbes**, A Al-Fuqaha “Design of a social collaboration and precise localization services for the blind and visually impaired “ Procedia Computer Science 21, 282-2914 2013
8. A Al-Fuqaha, **M Elbes**, A Rayes “An intelligent data fusion technique based on the particle filter to perform precise outdoor localization” International Journal of Pervasive Computing and Communications 9 (2), 163-183 2 2013



### Conferences:

- 1-** M. Elbes, E. Almaita, T. Alrawashdeh, T.Kanan, S. AlZu'bi, B.Hawashin "Indoor Localization; Fingerprinting; Location Based Services (LBS); Machine Learning", **2019** IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT).
- 2-** T. Kanan, O. Sadaqa, A. Aldajeh, H.Alshwabka, W. Sami, S. AlZu'bi, **M.Elbes**, Bilal H." A Review of Natural Language Processing and Machine Learning Tools Used to Analyze Arabic Social Media", **2019** IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT),
- 3-** S. AlZu'bi, A. Mughaid, B.Hawashin, **M. Elbes**, T. Kanan, T. Alrawashdeh, D. Aqel "Reconstructing Big Data Acquired from Radioisotope Distribution in Medical Scanner Detectors", **2019** IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)
- 4-** B. Hawashin, A. Mansour, J. Abukhait, F.Khazalah, S. AlZu'bi, T. Kanan, M. Obaidat, **M. Elbes** "Efficient Texture Classification Using Independent Component Analysis" **2019** IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)
- 5-** S. AlZu'bi ; B. Hawashin, **M.Elbes** ; M.Al-Ayyoub "A Novel Recommender System Based on Apriori Algorithm for Requirements Engineering ". Recent Patents on Computer Science. Accepted in Jan. **2018**.
- 6-** LT Lilien, **M Elbes**, L ben Othmane, RM Salih "Simulation of emergency response operations for a static chemical spill within a building using an opportunistic resource utilization network" Technologies for Homeland Security (HST), **2013** IEEE International Conference
- 7-** **M Elbes**, A Al-Fuqaha, A Rayes "Gyroscope drift correction based on TDoA technology in support of Pedestrian Dead Reckoning" Globecom Workshops (GC Wkshps), **2012** IEEE, 314-319 8 2012
- 8-** A Al-Fuqaha, D Kountanis, S Cooke, **M Elbes**, J Zhang" A genetic approach for trajectory planning in non-autonomous Mobile Ad-Hoc Networks with QoS requirements" GLOBECOM Workshops (GC Wkshps), 2010 IEEE, 1097-1102 **2010**
- 9-** **M Elbes**, A Al-Fuqaha, M Guizani, A Rayes, JS Oh "A new hierarchical and adaptive protocol for minimum-delay V2V communication" Global Telecommunications Conference, 2009. GLOBECOM 2009. IEEE, 1-6 5 **2009**



QF11/0110 - 3.0E

Curriculum Vitae Form - Procedures of Faculty Transfer and Promotion