

## CURRICULUM VITAE

### Mohammed Fayeq Abdel-Rahim Lafi

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#### 1. Personal Data

Date of Birth: 6 / 8 / 1972

Nationality: Jordanian

#### 2. Education

- Ph.D. in computer science and engineering, University of Toledo, Toledo, Ohio, USA
- Master in computer science, University of Jordan, Amman, Jordan
- B.Sc. Computer science, University of Jordan, Amman, Jordan

#### 3. Ph.D. Dissertation

*Synthesis of Partial Behavior Models from Overlapping Scenarios with Alternative Alphabets, University of Toledo, Toledo, Ohio, USA.*

#### 4. Employment

##### Academic Positions

- Assistant Professor, Software Engineering Department, Amman, Jordan , Al-Zaytoonah University of Jordan, 2/2/2011-
- Instructor, Computer science Department, Amman, Jordan , Al-Zaytoonah University of Jordan, 6/10/2003 – 5/10/2005
- Instructor, Software Engineering Department, Amman, Jordan , Al-Zaytoonah



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University of Jordan, 6/10/2005 – 31/12/2007

- Assistant Professor, Software Engineering Department, Amman, Jordan , Al-Zaytoonah University of Jordan, 2/2/2011-
- Instructor, Computer science Department, Amman, Jordan , Al-Zaytoonah University of Jordan, 6/10/2003 – 5/10/2005

## 5. Research Interests

My research interests involve software engineering and specifically the following: Requirements engineering, scenario-based requirements engineering, requirements elicitation and negotiation, model-based development and evolution, and bridging software requirements and software architectures, Software maintenance and evolution, code refactoring and reverse engineering., Database systems and Oracle programming, administration and consulting.

## 6. Fellowships and Scholarships

PhD scholarship from Al-Zaytoonah University of Jordan, from JAN 2008 to Dec 2011 to study PhD in Toledo University, OH, USA.

## 9. Teaching Experience

### • *Graduate Courses*

Advanced Software Testing  
Advanced project management

### *Undergraduate Courses*

Software Requirements  
Software Reengineering and Maintenance  
Object Oriented Software Engineering  
Software Validation and Verification  
Software Testing  
Project Management  
Artificial Intelligence  
Communications skills and professional ethics  
Technical Writing  
Database management  
Graduate Project  
Practical Training  
Object-Oriented Analysis And Design  
Software Engineering I  
Introduction to Software Engineering  
Algorithms Design and analysis  
Data Structures  
Advanced C++ Programming  
Programming In Java  
Special Topics in Computer Science



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computer skills II (Programming in visual basic)  
computer skills I ( introduction to computer science )

#### 10. Supervision of Graduate Research

- Student name: Ahmad Hammad,  
Thesis title: Automated test cases generation from requirements specification  
Date: 2019-2021
- Student name: Alaa Yousef Abd Alnabi  
Thesis title: An Improved Recommender System for Requirement Engineering  
Using an Efficient Semantical Method Integrated with a Novel Unified Requirement  
Writing  
Date: 2019-2021

#### 11. Grants

A novel integrated approach for software requirements documentation and management, 1/12/2015 -1/12/2016, Al-Zaytoonah University of Jordan, 17100JD.

Student graduation project: Sign language education and communication, King Abdullah II Fund for Development KAFD, 3/1/2016 -3/7/2016, 2375JD.

Intelligent Model for engineering software requirements, 14/5/2018 -14/11/2019, Al- Zaytoonah University of Jordan, 7000 JD.

Smart University- Power Conservation Using the Internet of Things  
(Microcontrollers, Sensors and Smart Programs for Data Analysis and Decisions making) 8/4/2019 - 8/11 /2020, Al- Zaytoonah University of Jordan, 14100JD.

#### 12. Membership of Committees

- National and International
  - *Serve as member to check the compliance of software engineering major in AQABA University*
- University
  - Coordinator of the courses curriculums committee in the Software Engineering Department - 2019/2020, 2020/2021 , 2021/2022.
  - Coordinator of the Examinations and Evaluation Committee in the Software Engineering Department -2013/2014, 2014-2015, 2018/2019.
  - Member of the Examinations and Evaluation Committee in the Software Engineering Department – 2017/2018, 2019/2020, 2020/2021, 2021/2022.
  - Member of the courses curriculums committee in the Software



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Engineering Department -2013/2014, 2014-2015,  
2015/2016,2016/2017,2018/2019  
- Coordinator of the Equation, Guidance, Training & Graduates Follow-up Committee 2016/2017, 2017/2018

### 13. Professional and Scientific Meetings

#### *Scientific Meetings Organized*

- Track Char of COVID-19 Information Technology Trends track in International Conference on Information Technology, at Al-Zaytoonah University, Amman, Jordan, 2021
- Track Char of Information Technology Trends track in the 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)

#### *Participation in Scientific meetings*

- Serve as scientific committee member and reviewer in 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT).
- Serve as scientific committee member and reviewer in International Conference on Information Technology, at Al-Zaytoonah University, Amman, Jordan, in 2011, 2013 ,2015, 2017, 2019, 2021.

### 14. Publications

#### Papers in refereed journals

AlZu'bi, S., Aqel, D. & **Lafi, M.** An intelligent system for blood donation process optimization - smart techniques for minimizing blood wastages. Cluster Comput (2022). <https://doi.org/10.1007/s10586-022-03594-3>.

Abusukhon, Ahmad, Bilal Hawashin, and **Mohammad Lafi.** "An Efficient System for Reducing the Power Consumption in Offices Using the Internet of Things." *Int. J. Advance Soft Compu. Appl* 13.1 (2021).



**M. Lafi**, B. Hawashin and S. AlZu'bi, *Eliciting Requirements From Stakeholders' Responses Using Natural Language Processing*, CMES-Computer Modeling in Engineering and Sciences, Accepted.

Hawashin, B., **Lafi, M.**, Kanan, T., and Mansour, A. *An efficient hybrid similarity measure based on user interests for recommender systems*. Expert Systems. 2020; 37:e12471. <https://doi.org/10.1111/exsy.12471>

**Lafi, M.**, and Abdel Qader, A. *A novel dynamic integrated model for automated requirements engineering process*. International Journal of Computer Applications in Technology 56, 4 (2017), 292–300.

**Lafi, M.**, and Abdel Qader, A. *A novel automated requirements prioritization and selection model based on requirements weights and stakeholder importance*. International Journal on Information Technology (IREIT) 4, 4 (2016), 105–109.

### **Books and Book Chapters**

**Lafi, M.**, and Carvalho, J. *Behavioral models with alternative alphabets*. In Innovations and Advances in Computer, Information, Systems Sciences, and Engineering. Springer, 2013, pp. 975–987.

**Lafi, M.** *Synthesis of partial behavior models from overlapping scenarios with alternative alphabets*. Electronic Thesis or Dissertation University of Toledo, 2011.

### **Conferences Presentations**

Zeyad H Mohammad and Ahmad Alkhatib and **Mohammed Lafi** and Ahmad Abusukhon and Dheeb Albashish and Jaffar Atwan. "Cryptanalysis of a Tightly-Secure Authenticated Key Exchange Without NAXOS Approach Based on Decision Linear Problem", International Conference on Information Technology (ICIT) (ICIT2021)

**Mohammed Lafi** and Thamer Alrawashdeh and Ahmad Hammad, "Automated Test Cases Generation From Requirements Specification", International Conference on Information Technology (ICIT) (ICIT2021)

**M. Lafi**, B. Hawashin and S. AlZu'bi, Maintenance Requests Labeling Using Machine Learning Classification, *2020 Seventh International Conference on Software Defined Systems (SDS)*, Paris, France, 2020, pp. 245-249, doi: 0.1109/SDS49854.2020.9143895

**Lafi, M.**, Osman, M. S., and Wasmi, H. A. Improved monkey tool for random testing in mobile applications. In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT) (April 2019), pp. 658–662.



Hourani, H., Hammad, A., and **Lafi, M.** The impact of artificial intelligence on software testing. In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT) (April 2019), pp. 565–570.

**Lafi, M.**, Botros, J. W., Kafaween, H., Al-Dasoqi, A. B., and Al-Tamimi, A. Code smells analysis mechanisms, detection issues, and effect on software maintainability. In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT) (April 2019), pp. 663–666.

Farhan, K. A., Abdel-Fattah, F., Altarawneh, F., and **Lafi, M.** Survey paper on multicast routing in mobile ad-hoc networks. In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT) (April 2019), pp. 449–452.

**Lafi, M.**, and Carvalho, J. *Detecting and decomposing overlapping scenarios using pattern matching*. In African Conference on Software Engineering and Applied Computing 2011 (2011), ACSEAC 2011.