

## Assist. Prof. Dr. Shahin Mehdipour Atae

### Curriculum Vitae

1. **Name / Surname:** Shahin Mehdipour Atae

2. **Date of Birth:** 22 June 1983

3. **Title:** Assist. Prof. Dr.

4. **Educational Background:**

Degree	Major	Institution	Year
Undergraduate	Software Engineering	Mazandaran University of Science & Technology	2006
Graduate	Software Engineering	Qazvin Azad University	2010
PhD	Computer Engineering	Eastern Mediterranean University	2018

5. **Position held:**

Title	Institution	Year
Faculty Member	Final International University	Since Sep. 2018
Part-time Faculty Member	Eastern Mediterranean University	2015 to 2018
Sen. Inst.	Girne American University	2015 to 2016
Department Coordinator	Eastern Mediterranean University	2013 to July 2015
Research Assistant	Eastern Mediterranean University	2011 to 2014

6. **Publications:**

Shrifi O, Mehdipour Atae Sh., Bayram Z. (2019), "Frame Logic-based specification and discovery of semantic web services with application to medical appointments", Expert Systems, 2019. e12387, DOI: 10.1111/exsy.12387

Mehdipour Atae Sh., Bayram Z. (2018), "An Improved Abstract State Machine Based Choreography Specification and Execution Algorithm for Semantic Web Services", Scientific Programming, Article Number: 4094951, 2018, DOI: 10.1155/2018/4094951

Mehdipour Atae Sh., Bayram Z. (2015), "A novel concise specification and efficient F-logic based matching of Semantic Web Services in Flora-2", 30th International Symposium on Computer and Information Sciences, ISCIS 2015, September 21-25, Imperial College, London, UK

Mehdipour Atae Sh, Broumandnia A. (2012), "Identifying Periodical Activities Independent of Video Content", Journal of Electronic Science and Technology, Page(s): 122-129, Volume: 12, Issue: 1, Year: 2014

Haghighat A. T., Mehdipour Atae Sh., "Operating Systems Design and Implementation", Member of editorial board of translated version, published by Homaye Danesh, Tehran 2008

7. **Thesis Defense Examining Committee Member:**

Aribisogan Pamilerin Vivian, "Web Accessible Knowledge Based Course and Classroom Scheduling Management", May 2019, Department of Computer Engineering, Eastern Mediterranean University

8. **Scientific/Academic Projects done:**

8.1. **PhD program:**

**Improved objective function of a complicated system using Genetic Algorithm**

Implemented a complicated mathematical model of an optimization problem and improved its objective function by using a very complicated genetic algorithm for producing the generations. Advanced data structures and algorithms are used. The project is completely coded in C#.

### **Query Analysis over Document Corpus, Information Retrieval**

Studied different methods of text searching and query analysis over fairly large text databases and developed a search engine system based on TF-IDF criterion for computing of query-document similarities, document ranking and text analyzing.

### **Implemented Decision Tree Data Mining Algorithm**

Developed a fully feature data-miner application based on Decision Tree Algorithm, entropy-based evaluation was applied at each node besides providing pre and post processing functions.

### **Classification Solution using Support Vector Machines (SVM) for Traffic Accident Analysis**

Extended and configured of SVM for analysis of traffic accidents applied in a PhD dissertation. The SVM code is written in MATLAB and we achieved a higher performance and accuracy in classification solution.

### **A Parallel solution for 8-Queens problem**

Implemented a fully distributed system which can solve any divisible problem in parallel by assigning sub-problems to different computing engines. Visual Studio 2010 was used for this project.

### **Pattern Classification, Pattern Recognition**

Studied and developed a software system for comparing different pattern classification algorithms (K-nearest neighbor, Probabilistic Neural Network) tested on a number of reference databases and made a comparison among their results for extracting general rules.

### **Cryptography Analysis, Network Security**

Studied and developed the well-known cryptography systems; AES, DES, Hill Cipher and analyzed system performance for each of them.

## **8.2. Master Program:**

### **Video Content Analyzing, Computer Vision**

Developed a new periodic motion detection system utilizing in video compressing and multimedia sensor network optimization.

### **Security of Sensor Networks**

Studied different attacking methods over wireless sensor networks and proposed some specific defenses against them.

### **Distributed Computer Systems**

Analyzed distributed component object model (DCOM) and its weaknesses in compare with CORBA and developed some modified modules.

### **Software Fault Tolerance**

Studied different solutions for Byzantine Faults in computer systems and proposed some optimizations.

### **Advanced Indexing of Databases**

Studied different methods of indexing over XML-DBs and developed a new bitmap-fuzzy indexing system tested on typical XML-DBs.

### **Distributed Shared Workspace**

Introduced and Implemented a distributed user-interface architecture for shared workspaces; by using of Visual Studio 2005.

### **8.3. Bachelor Program:**

#### **Compiler Design**

Reimplementation of the lexical analyzer of Pascal compiler for proper highlighting and indentation.

#### **Operating Systems**

Enabled a single-tasking operating system (DOS) to emulate like a multi-tasking environment.

#### **Solving 15 Square with AI**

An A\* algorithm written in Java to solve 15 Square game

### **9. Other Certificates**

Cisco CCNA (2009)

Microsoft Network+ (2009)

Android Programming – certified with distinction (April 2014)

Process Mining – certified with distinction (January 2015)

Full Stack Web Developer (July 2017)

### **10. Computer Languages and software proficiency**

Process Mining Tools: ProM, Disco

Eclipse: Android Development Toolkit

.Net Package, C#, Java, XML, HTML, and SQL (professional)

MATLAB, C, C++, and VB.Net (Advanced)

Modeling Languages: BPMN 2.0, UML, BPEL

Industrial software: Quartus II, Proteus (ISIS), Max-Plus II, OPNET

Development Environment: Microsoft Visual Studio .Net v. 4.5, Microsoft SQL Server Management Studio, Eclipse

### **11. Memberships**

Informatics Society of Iran

Computer Society of Iran

Editorial Members of Homaye Danesh Publications

### **12. Courses already thought**

Operating Systems	Digital Logic Systems/Design
Data Communication and Computer Networks	Microprocessors
Cryptography and Network Security	Computer Programming
Computer Architecture	Database Systems

Management Information Systems

Data Structures and Algorithms

Information Technologies

Computer Fundamentals and Introduction to  
Programming