

Jafar Mohammadi's Resume

Computer Engineering Department,
Sharif University of Technology,
Azadi Avenue, Tehran, Iran
Phone: (+98 21) 6164130 (DML Lab.)
Email: Mohammadi@ce.sharif.edu
URL: <http://ce.sharif.edu/~muhammadi/>

Objective

Specific areas of interest include:

- Digital Image and Video Processing
- Semantic Relation Extraction In Images
- Pattern Recognition
- Cognitive Science and Human learning Modeling
- Fuzzy Systems
- Knowledge Discovery and Data Mining.

Education

- M. Sc.**
(2003-2006) Sharif University of Technology, Tehran-Iran (<http://www.sharif.edu/>)
Computer Engineering - Artificial Intelligence
Thesis: Semantic Relation Extraction From Face Features
Advisor: Dr. H. R. Rabiee (<http://sharif.ac.ir/~rabiee/>)
GPA: 18.26/20
- B. Sc.**
(1999- 2003) Iran University of Science and Technology (<http://www.iust.ac.ir/>)
Computer Engineering - Software Engineering
Thesis: FlexQG, Data Mining Flexible Query Generator Language
Advisor: Dr. M. Kangavari
GPA: 15.8/20
- Diploma**
(1995-1999) Imam Jafar Sadegh High School, Miandoab-Iran
Diploma in Mathematics and Physics
GPA: 19.05/20

Experiences

- Advanced Information and Communication Technology Center of Sharif University**
(February 2004 - Now) As a member of Digital Media Research Laboratory (DML), developing face detection and facial expression algorithms. These algorithms will be specifically directed to face detection in color images using skin color models, analysis of face images, facial expression extraction and finally Deception detection in human images.
- Mazandaran University of Science & Technology**
(Spring 2005 - Now) Department of Computer Engineering
Lecturer: Discrete Mathematics and Artificial Intelligence Courses in Spring 2005 Semester.
Artificial Intelligence, Web Programming and Data Structures Courses in Fall 2005 Semester.
Data Structures , Image Processing, Programming Languages: Design and Implementation and Algorithms Courses in Spring 2006 Semester.
- Iran Telecommunication Research Center**
(Jun 2002 - January 2003) As a member of Info-Society Department doing research on Learner Style Modeling to a Case based Tutoring System. I worked on needed ontologies and I developed an Ontology Editor for reasoning unit of ITS system.
Earlier I worked at Natural Language Processing Group on Stemming. I developed a flexible stemming system, for English language.
Also I researched on combining visual languages and expert languages such as CLISP for reasoning management of Info-Society intelligent developments.

Behbood Danesh Co.
(January 2003 - February 2004)

We developed a General Worker's Education Management System for medium and big manufactures according to ISO9001,9002.

Shakhes Group Co.
(June 2002 - March 2003)

As a Project Manager and developer of MIS and Software projects, managing, analyzing and developing of some projects such as: MIS of Bijar Ayeghbam Co., Document Management System of Talachin Company research group (storage, retrieve, indexing, search, ...).

Perspolis Institute of Education
(June 2002 - February 2003)

As designer of educational objective tests and exams for AI students.

Execution Activities

- Editorial of Scientific Magazine of Iran University of Science and Technology, Computer Engineering Department, "Mabna=2", Sep. 2001- Aug.2003.
- Director of scientific Society of Computer Engineering, Iran University of Science and Technology, Sep. 2001- Aug. 2003.
- Chairman of Magazine Committee of Iran University of Science and technology, Sep. 2002 - Aug. 2003.
- General Chairman of Fifth Iran University of Science and Technology Computer Conference, CFSC2003.

As Teacher Assistance

- Data Structures and Algorithms, Iran University of Science and Technology, Computer Engineering Department, first and second semester 2002.
- Algorithms Designing, Iran University of Science and Technology, Computer Engineering Department, first semester 2002.
- Programming Languages: Designing and Implementation, Iran University of Science and Technology, Computer Engineering Department, second semester 2002.
- Data Structure and Algorithms, Sharif University of Technology, Computer Engineering Department, first semester 2004.
- Programming Languages: Designing and Implementation, Sharif University of Technology, Computer Engineering Department, first semester 2004.

Courses & Projects

Image Processing

Signal Processing, Image Processing, Machine vision, Stochastic Processes, Statistical Pattern Recognition.

Artificial Intelligence

Neural Networks, Fuzzy Systems, AI Planning, Automata theory.

Selected Projects

- Face Detection using Skin Color Model in color images (Matlab).
- Fingerprint Verification System for Image Processing Course (Matlab, Delphi)
- Camera Wide Lens Distortion Removing For Machine Vision Course (Matlab)
- Dynamic Voting Website For Internet Engineering Course (ASP, JavaScript, XML, Html)
- Minesweeper Game for Advanced Programming Course (C++)
- Faculty Registration System for Fundamentals of Programming Course (C++)

- Jampiler - a semi Pascal compiler for Compiler Course (JBuilder)
- Development of DBase III operations for Database Laboratory Course (Delphi)
- External data Sorting using Dual Heap Sort for Information Storage & Retrieval Course (Delphi)
- Color Conversion Toolbox (Matlab)

Skills

Computer Programming	Visual C++, Borland C++, C++ Builder, Basic, Pascal, C/C++, Assembly, HTML, Delphi, Java, JBuilder, Java Script, VBScript, ASP, XML
Operating Systems	Windows 9x/NT/2000/XP, Linux, DOS
Database	SQL Server, Microsoft Access, MySQL
CAD Tools	MATLAB, Xilinx Foundation Series, Electronic Workbench, Rational Rose
Desktop Tools	Microsoft Office, Photoshop, Multimedia builder

Publications

Conference Papers	<p>J. Mohammadi, "A New Approach For Fingerprint Verification in Large Databases", Proceedings of the Fifth Iran University of Science and Technology Computer Conference , CFSC2003, Tehran, Iran, May 2003, (In Persian).</p> <p>J. Mohammadi, M. Kangavari, M. Moosapoor, N. Noori, "FlexQG: Flexible Data Mining Query Generator Language", The 10th Computer Society of Iran Computer Conference, CSICC2005, Iran telecommunication Research Center, 2005, (In Persian).</p> <p>J. Mohammadi, Hamid Reza Rabiee, Mohammad Ghanbari , "Skin Detection using Projected Elliptical Model In $L^a \cdot b^b$ Color Space ", The 11th Computer Society of Iran Computer Conference, CSICC2006 Institute for Studies in Theoretical Physics and Mathematics, 2006, (In Persian).</p> <p>J. Mohammadi, Hamid Reza Rabiee, Mohammad Ghanbari , "Conceptual Image Segmentation using Binary Space Partitioning Trees", The Iranian Conference on Electrical Engineering (ICEE 2006), Amirkabir University, 2006, (Submitted in Persian).</p> <p>J. Mohammadi, Hamid Reza Rabiee, Mohammad Ghanbari , "Skin Detection using Skin Models", IEE journal of (Submitted).</p>
B. Sc. Thesis	J. Mohammadi, "FlexQG: Flexible Data Mining Query Generator Language Designing", B.Sc. thesis, Department of Computer Engineering, Iran University of Science and Technology, Sep. 2003, (In Persian).
M. Sc. Thesis	J. Mohammadi, "Semantic Relation Extraction From Face Features", M.Sc. thesis, Department of Computer Engineering, Sharif University of Technology, March 2006, (In Persian).
Technical Reports	Color, Theory, Models, and Conversions of Color Spaces, Jan. 2005, (In Persian).