Amir Jamali

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Contact information

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Born: January 25, 1983—Tehran, Iran
Nationality: Iranian

Current position

Researcher & Developer in computer vision, machine learning and data science at Faraadid Company
URL: http://www.faraadid.com/VisitorPages/default.aspx?itemid=3
Linkedin: https://www.linkedin.com/company/faraadid?trk=company$_{l}ogo$

Areas of specialization & Interests

- **Image Processing**

- **Computer Vision**

- **Deep Learning**

- **Camera Calibration Issues**

- **3D Reconstruction Using Single or Multiple Cameras**

- **Machine Learning**

- **Data Science**

- **Network Cybersecurity using ipfix data**

- **Electronic Circuits Design(Schematic and PCB)**

Education

2001-2006 B.Sc in Electronic, K. N. toosi University of Technology
Thesis : Three Phase Three level Matrix and Diode Clamp DC/AC inverter

2012-2014 M.Sc in Electronic-Digital-Systems, Amirkabir University of Technology - Tehran Polytechnic
Thesis : Sparse and Dense 3D Face Modelling based on 2.5D AAM Approach from a Single Image
To see a brief review of my thesis, please click Here.
GPA : 17.07/20

Grants, honors & awards

2001 Ranked within top 0.3% in Iran universities entrance exam among about 260,000 nationwide students(B.Sc entrance exam)

20012 Ranked within top 0.5% in Iran universities entrance exam among about 30,000 graduated nationwide students(M.Sc entrance exam)

2016 One of my professional project Fire & Smoke Detection is successfully tested in real condition at Department of Environment of Iran fire extinguisher maneuver at Ilam state in Iran. For more information, please visit Fire & Smoke Detection Section at Here
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M.Sc Courses

Course	Grade
Digital Signal Processing	A
Image Processing	B
Data Communication Networks	A
Neural Networks	A
Machine Vision	A
Sele. Top. in Electronic(3D Computer Vision)	A
Statistical Pattern Recognition	B
Computational Intelligence & Its Applications in Mechatronics	A

Work Experience

2009-2012 Linear and Switching Power Supplies Design(PCB & Schematics) for 1KW Radio FM Transmitters at K. N. toosi University of Technology

2014-2017 Research & Develop following application in C++ and python at Faraadid Co:

- **Face Recognition using Deep Convolutional Neural Networks**

- **People Counting from bird's eye View Camera**

- **Fire and Smoke Detection**

- **Intrusion Detection in forbidden Areas**

- **Camera Tampering Detection**

- **Abandoned Object Detection**

- **Network Anomaly Detection(Network Cybersecurity)**(by applying machine learning techniques to online ipfix Data)

- **Car License Plate Detection, Recognition using Deep Convolutional Neural Networks**(including online report of breaking law cars' position from serial port GPS receiver to remote database)

  To see a brief review of my professional projects, please click Here
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  You can also visit some of above projects at Faraadid Co Surveillance Products website

Academic Membership

Student member of 'Institute of Electrical and Electronics Engineers IEEE.' (Iran Section) Member No: 92904433

Language Skills

- **Persian** : Native

- **English** : Fluent

- **Arabic** : Familiar

Technical Skills

- **Machine Learning and Image Processing Tools and Libraries**

  - TensorFlow, MatConvNets and some experience with Caffe and Torch
  - OpenCV
  - Matlab toolboxes
  - LIBSVM

- **Programming Languages and Development**

  - C, C++, Python,Matlab, Matlab(MEX), BASH, Qt Framework, gcc, g++, cmake

- **Web Server and Database**

  - MySQL, phpMyAdmin

- **Source Control**

  - Git, SVN

- **IDE**

  - Visual Studio, Qt Creator, Spyder, jupyter notebook

- **Text Editors**
  - Vim, Latex, Office
- **Simulator Tools**
  - Orcad Pspice, Xilinx
- **PCB Hardware Design Tools**
  - Altium Designer
- **Operating Systems**
  - Linux, Windows

Teaching

2013-2014 Electronic lab instructor at Amirkabir University of Technology Department of Computer Engineering and Information Technology

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Publications & talks

JOURNAL ARTICLES

in preparation "Sparse and Dense 3D face modelling from single view face image"