Amir Jamali

Amirkabir University of Technology - Tehran Polytechnic

Contact information

Phone: +989123970029
email1: a.jamali@aut.ac.ir
email2: jamali.amir@gmail.com
URL: https://amir-jamali.github.io/
Linkedin: https://www.linkedin.com/in/amir-jamali/

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_logo

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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)

2012 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

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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"