

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=companylogo

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

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

2012-2015

2001

2012

2016

Grants, honors & awards

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

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

One of my professional project Fire $\dot{\sigma}$ 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 $\dot{\sigma}$ Smoke Detection Section at Here

M.Sc Courses

| Course | GRADE |
|---|-------|
| Digital Signal Processing | A |
| Image Processing | В |
| Data Communication Networks | A |
| Neural Networks | A |
| Machine Vision | A |
| Special Topics in Electronics(3D Computer Vision) | A |
| Statistical Pattern Recognition | В |
| Computational Intelligence $\mathring{\sigma}$ 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

•

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

Publications & talks

JOURNAL ARTICLES

in preparation

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