

Amir Jamali

Amirkabir University of Technology - Tehran Polytechnic

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=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)

Publications & talks

JOURNAL ARTICLES

in preparation

"A Two-Branch Deep Convolutional Neural Network Model of Transsaccadic Integration of Visual Features"

Education

2012-2015

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

2001-2006

B.Sc in Electronic, K. N. Toosi University of Technology

Thesis: Three Phase Three level Matrix and Diode Clamp DC/AC inverter

Grants, honors & awards

2016

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

2012

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

2001

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

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

Licenses and certifications

2018-2019 Deep Learning Specialization(deeplearning.ai):

https://www.coursera.org/account/accomplishments/specialization/QTT3WYF5UBA9

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Neural Networks and Deep Learning:

https://www.coursera.org/account/accomplishments/verify/W9UUWFNE6GHJ

Improving Deep Neural Networks; Hyperparameter tuning, Regularization and Optimization: https://www.coursera.org/account/accomplishments/verify/DTMA6Z6P8FG3

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Structuring Machine Learning Projects:

https://www.coursera.org/account/accomplishments/verify/PRE9LPAHCB2U

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Convolutional Neural Networks:

https://www.coursera.org/account/accomplishments/verify/BABYV93CXTRS

Sequence Models:

https://www.coursera.org/account/accomplishments/verify/BE9Z2LRQTZKY

Work Experience

2014-2019 Research & Develop following application in C++ and python at Faraadid Co and Bayan Vision Co:

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

- Face Recognition and Face Grouping
- Face Expression
- People Counting from bird's eye View Camera
- Pedestrian Detection
- Crowd Estimation
- 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 : NativeEnglish : FluentArabic : Familiar

Technical Skills

- Machine Learning and Image Processing Tools and Libraries
 - PyTorch, TensorFlow, MatConvNets
 - 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