



Amir Jamali

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## Contact information

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Born: January 25, 1983—Tehran, Iran

Nationality: Iranian

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## 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](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)**

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## Publications & talks

### JOURNAL ARTICLES

- in preparation “A Two-Branch Deep Convolutional Neural Network Model of Transsaccadic Integration of Visual Features”
- temporarily submitted to : [Shared Visual Representations in Human Machine Intelligence\(SVRHM 2019\)](#)
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## 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
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## Grants, honors & awards

- 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](#).
- 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)
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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
Special Topics in Electronics(3D Computer Vision)	A
Statistical Pattern Recognition	B
Computational Intelligence & Its Applications in Mechatronics	A

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## 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>

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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>

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Sequence Models:

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

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## Work Experience

2014-2019

Research & Develop following application in C++ and python at [Faraadid Co](#) and [Bayan 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](#)

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## Academic Membership

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

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## Language Skills

- **Persian** : Native
  - **English** : Fluent
  - **Arabic** : Familiar
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## 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

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## Teaching

2013-2014

Electronic lab instructor at [Amirkabir University of Technology](#) Department of Computer Engineering and Information Technology