# Mohammad Javadi

Curriculum Vitae

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#### Research Interests

- Deep Learning
- Digital Image Processing
- Intelligent Robotics

- Computer Vision
- Bioinformatics

## Education

2013-2017

B.Sc. Information Technology,

(expected) Amirkabir University of Technology (Tehran Polytechnic), Tehran, Iran, High Graded Related Courses: Advanced Programming: 20, Design of Algorithms: 19.7, Foundations of Data Mining: 18.8, Signals & Systems: 15.75(among top 3 grades), Data Structures. & Algorithms: 15.9.

2009–2012 Diploma in Mathematics and Physics, Allame Helli 2 High School, Tehran, Iran.

### Honor and Awards

- July 2016 1th place of Robocup Humanoid Teen Size League Technical Challenge International Robocup Competiotion, Leipzig, Germany.
- April 2016 1th place of Robocup Humanoid Teen Size League Soccer Challange Iranopen Robocup Competition, Tehran, Iran.
- July 2015 2th place of Robocup Humanoid Teen Size League Technical Challenge International Robocup Competition, Hefei, China.
- July 2015 3th place of Robocup Humanoid Teen size league Soccer Challange International Robocup Competition, Hefei, China.
- April 2015 1th place of Robocup Humanoid Teen size humanoid league Technical Challange Iranopen Robocup Competition, Tehran, Iran.
- July 2013 Nationwide University Entrance Exam 2013. Ranked in the top 0.002% among all applicants **ranked 770**.(out of 300000+ participants)

#### **Publications**

[1] Javadi M, Azar SM, Azami S, Shiry S, Ghidary SS, Baltes J. Humanoid Robot Detection using Deep Learning: A Speed-Accuracy Tradeoff, International Robocup Symposium, July 2017.

- [2] Sadeghnejad S, Baltes J, Ramezani S, **Javadi M**, Karimi M, Valaei A, Santos J, Poon T, Yazadnkhou B, Alihosseini D, Hosseini MS. AUTMan Humanoid TeenSize Team Description Paper, July 2016.
- [3] Sadeghnejad S, Baltes J, Ramezani S, Karimi M, **Javadi M**, Karimi M, Valaei A, Ahmadi A, Hosseinmemar A, Santos J, Poon T, Shamshirdar F, Heydari M, Azari B, Behjou S. AUT-UofM Humanoid TeenSize Team Description Paper RoboCup 2015 Humanoid TeenSize Robot League, July 2015.

## **Technical Reports**

- [1] **Javadi M**, Valaee A. A High Speed Vision System for Humanoid Soccer Player Robots, August 2017.
- [2] **Javadi M**, Alihosseini D. Take A Simple Look to Humanoid Robot Localization using Particle Filter, September 2017.

# Research Experience

April 2014 – **Research Assistant**, Humanoid Robotic Laboratory in Amirkabir Robotic Cen-July 2017 ter(ARC), Tehran, Iran

Supervisors: Prof. Mohsen Bahrami, Prof. Jacky Baltes, Prof. Saeed shiry, Dr. Soroush Sadeghnejad

\*AUT-UofM Humanoid Robotic team(Joint team with Snobots from University of Manitoba)

## Teaching Experience

- Spring 2017 **Teaching Assistant**, *Advanced Programming (JAVA)*, Dr. Noorhosseini, Computer Engineering department, Amirkabir University of technology.
  - Fall 2016 **Teaching Assistant**, *Operating Systems*, Dr. Taheri, Computer Engineering department, Amirkabir University of technology.
- Spring 2015 **Teaching Assistant**, Advanced Programming (JAVA), Dr. Pourvatan, Computer Engineering department, Amirkabir University of technology.

## Work Experience

- March 2016 **Mobile Application Developer**, HIRAD COMPANY, Advanced Technology Centre of Amirkabir University of Technology, Tehran, Iran.

  Mobile Application Development for Home Automation
- October, 2015 Computer Vision Developer, Mobin Intelligent System, Fatemi st, Tehran, February, 2016 Iran.

Implementation of a Base Code for Vehicle Registration Plate Detection

# Research Projects

September Vehicle Registration Plate Recognition using CNNs, My bachelor thesis, Cog-2017 - April nitive Robotics Lab. August 2017 - **Online Person Clustering in At-Home Robots and Videos,** Research for im-September provement of person clustering and re-identification, Cognitive Robotics Lab. 2017

Spring 2017 Humanoid Robot Detection Using Deep Learning: A Speed-Accuracy Tradeoff, Implementation of several two-stage detection systems based on various CNN's for detection of humanoid robots in soccer field and highlighting their speed-accuracy trade off, Bio-Inspired System Design Laboratory.

February Humanoid Robot Localization using Particle Filter, Implementation of Particle 2016 - May Filter for humanoid robot localization in soccer field, AUTMan Humanoid Robotic 2017 Team.

September A High Speed Vision System for Humanoid Soccer Player Robots, Implemen-2014, ended tation of a high-speed cognition module based on edge-based color-aided image June 2017 processing algorithms and deep learning, AUTMan Humanoid Robotic Team.

# Professional Experience

September Introduction to Convolutional Neural Network, data mining workshop of Amirkabir

2017 University of Technology.

May 2015 Lecturer and member of 8th linux festival organization team, Amirkabir University of Technology.

May 2014 Lecturer and member of 7th linux festival organization team, Amirkabir University of Technology.

## Languages

Persian Mother Tongue

English Moderate

Turkish Fluent

(Azeri)

### Technical skills

Programming C, C++, Qt, Java, Python, Matlab

Languages

Operating Linux, Windows, Macintosh

Systems

Tools, Expert in: Linux, ROS, Git, OpenCV

Frameworks Familiar with: Caffe.