

# Mohammad Abbasi-Rad

A programmer and computer science researcher.

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Github: <http://github.com/darkoob12>

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## Education

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- Shiraz University, 2006  
**B.Sc. in Mathematics**
- Shiraz University, 2011  
**M.Sc. in Computer Engineering (Artificial Intelligence)**  
Advisor: Dr. Ali Hamzeh  
Thesis: *Proposing a Novel Method for Many-Objective Optimization Using Evolutionary Algorithms*

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## Publication

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M. Abbasi Rad, A. Hamzeh **"A Coevolutionary Approach to many objective optimization based on a novel ranking method"** in *Intelligent Data Analysis* Volume 20 (1) 2016

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## Work Experience

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- Center of Intelligent Vision And Image Processing (*of Shiraz University*) **2015 - 2017**
  - Research on Vehicle Height Estimation
  - Development (Web App using C#)
  - Database Design and Implementation (C# and SQL Server)
  - Development (Windows App C#, Aforge.net, Emgu.CV)
  - Implementing Plate Segmentation (C# Emgu.CV)
- Deed Asia Corp. **Since 2017**
  - Research Supervisor:
    - Segmentation (CNN, Python)
    - Optical Character Recognition (CNN, Python)
    - Object Detection (Cascade Classifier, Matlab)
    - Plate Color Recognition (CNN, Python)
  - Leading Developer:
    - Segmentation and OCR (TensorFlow, C++)
    - License Plate Recognition (OpenCV, C++)
  - Software Designer:
    - Speed Estimation Application (*The software is currently used in major cities of Fars province, Iran.*)
    - CarPark Application (Plate recognition using a moving vehicle with multiple cameras. *Currently is in use for traffic control of Shiraz City.*)

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## Research Topics

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*I worked on these topics during my graduate studies*

*Source code of these projects are available on my GitHub account.*

- Breaking Visual CAPTCHAs using Support Vector Machines (Final project for Pattern Recognition course.)
- Fuzzy Rule Based Classification System (Final project for Fuzzy Logic and Systems course)
- Link Prediction (KDD Cup 2012)
- Multi-Objective Clustering (Final project for Distributed AI course)
- Fuzzy Prototype Learning
- Feature Selection Using Genetic Algorithms
- Multi-Objective Clustering Using Genetic Algorithms
- Part of Speech Tagging.

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## Academic Services

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- Teaching Assistant
  - Evolutionary Computation 2012
- Journal Review:
  - IEEE Transactions on Evolutionary Computation
  - IEEE Transactions on Cybernetics
- Conferences:
  - Artificial Intelligence and Signal Processing (AISP), 2012 16th CSI International Symposium on
  - Information and Knowledge Technology (IKT), 2013 5th Conference on

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## Skills

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- Languages:
  - Persian
  - English (TOEFL Score : 105)
  - Français (A1)
- Software Development:
  - Object Oriented Analysis and Design
  - Version Control Systems
  - Unit Testing (Google Test, NUnit)
  - Functional Programming
  - Web Development (ASP.Net, MEAN)
  - Windows Forms Development
- Programming Languages
  - Expert: C#, Java, Python, Javascript
  - Professional: C, C++, Matlab, SQL,
  - Intermediate: Erlang, R, Visual Basic
- Software Libraries:

- Python: numpy, scipy, scikit-learn, PIL, opencv, matplotlib, keras, tensorflow, scrapy, nltk
  - Java: jMetal, MOEAFramework, Weka
  - C#/C++: Accord.Net, Aforge.Net, OpenCV, TensorFlow, CNTK, TPL.DataFlow
- Other:
  - Computer Networking (Network+)
  - Graphic Tools (Photoshop, Illustrator, Visio)
  - Latex