

# ALI GHOLAMI

## Software Engineer & Computer Vision Researcher

@ aligholamee@outlook.com

Tehran, IR

aligholamee.github.io

@aligholamee



## EDUCATION

### B.Sc. in Computer Engineering

#### Amirkabir University of Technology

Oct 2014 – Dec 2018

Tehran, IR

- Cumulative GPA – 17.54 / 20

### Diploma in Mathematics

#### Kamal Highschool

Oct 2012 – July 2014

- Cumulative GPA – 19 / 20

## RESEARCH EXPERIENCE

### Machine Learning Lab

#### Research Scientist

July 2018 – Ongoing

Tehran, IR

- Analysis of formal representations of deep learning models in image style transfer.
- Exploration of CNN and RNN architectures in visual question answering and image captioning tasks.
- Design and implementation of generative models with *Tensorflow*.
- Inspection of statistical methods in face recognition.
- Acceleration of image processing algorithms with *CUDA*.

## WORK EXPERIENCE

### ArvanCloud

#### Web Developer

Jun 2017 – Sep 2017

Tehran, IR

- Design and implementation of an administrative panel using *PHP* and *Laravel*.
- Practicing the best coding styles in *Javascript*, especially *Node.js* and *React.js*.

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#### Mobile Developer

Jun 2017 – Sep 2017

Tehran, IR

- Development of a poetry application with *React Native*.
- Coding of a pure android weather forecast application.

## TEACHING EXPERIENCE

### Microprocessors and Assembly Language

#### Supervisor: Prof. Mohammad Mahdi Homayounpour

Sep 1017 – Dec 2017

Tehran, IR

### Foundations of Programming

#### Supervisor: Prof. Azadeh Mansouri

Sep 2015 – Dec 2015

Tehran, IR

## SELECTED HONORS



### Ranked top 3

among most active GitHub developers in Iran.



### Full admission

to Amirkabir University of Technology due to outstanding performance at Kharazmi University of Tehran.



### Ranked top 0.6%

in the nationwide university entrance exam (approx. 250,000).



### Elected as tidiest

student at the campus of international summer school, Institute Monte Rosa, Montreux, Switzerland.

## PROGRAMMING SKILLS

Python Weka Pandas Tensorflow  
Numpy Matplotlib RapidMiner

Racket ML Scheme

HTML CSS SASS PHP Laravel  
Javascript Node.js

Java SE React Native XML Latex

VHDL Verilog HLS ARM AVR

C C++ OpenMP CUDA

## LANGUAGES

English  
Spanish  
German



## PUBLICATIONS

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### Technical Reports

- Gholami, Ali (2018b). *Implementation and Optimization of Image Template Matching with CUDA*. tech. rep. 1. Multi-core programming project report. Department of computer engineering and information technology: Amirkabir University of Technology.
- Gholami, Ali (2018d). *Maximum Likelihood Approximate Nearest Neighbor Method in Real-time Image Recognition*. Tech. rep. 2. Statistical pattern recognition project report. Department of computer engineering and information technology: Amirkabir University of Technology.

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### Coursework Reports

- Gholami, Ali (2018a). *Dimensionality reduction strategies; Principal Component Analysis, Fisher Linear Discriminant and Feature Subset Selection*. Available at: <https://goo.gl/kkajZ1>.
- Gholami, Ali (2018c). *Linear Discriminant Functions, Support Vector Machine and Unsupervised Learning*. Available at: <https://goo.gl/w9tojs>.
- Gholami, Ali (2018e). *Non-parametric methods; Kernel Density Estimation*. Available at: <https://goo.gl/j4wcjg>.
- Gholami, Ali (2018f). *Visualization of classification models with RapidMiner*. Available at: <https://goo.gl/eSJLaE>.
- Gholami, Ali (2017a). *Analysis of Bayesian Decision Boundaries, Risk Minimization and Bayes Error Bounds*. Available at: <https://goo.gl/XKz7dh>.
- Gholami, Ali (2017b). *Association rule mining and feature engineering in unstructured datasets*. Available at: <https://goo.gl/G8fe6E>.
- Gholami, Ali (2017c). *Implementation and evaluation of Decision Tree models on Annealing dataset*. Available at: <https://goo.gl/JbBDPT>.
- Gholami, Ali (2017d). *Implementation and evaluation of Decision Tree models on Annealing dataset*. Available at: <https://goo.gl/JbBDPT>.
- Gholami, Ali (2017e). *Introduction to Linear Algebra, Probability and Statistics*. Available at: <https://goo.gl/uCUWDX>.
- Gholami, Ali (2017f). *Parametric methods; Maximum Likelihood and Bayesian Parameter Estimation*. Available at: <https://goo.gl/Mc9wfm>.

## REFEREES

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**Prof. Mohammad Mahdi Homayounpour**

@ homayoun@aut.ac.ir



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**Prof. Mohammad Rahmati**

@ rahmati@aut.ac.ir



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**Prof. Ehsan Nazerfard**

@ nazerfard@aut.ac.ir

