## **ALI GHOLAMI**

#### Software Engineer & Computer Vision Researcher

- G github.com/aligholamee
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#### **EDUCATION**

#### B.Sc. in Computer Engineering

Amirkabir University of Technology (Tehran Polytechnic)

▼ Tehran, IR



#### Qualifications

- Cumulative GPA ~ 17.65 / 20 (122 Credits)
- Last 60 Units GPA  $\sim$  17.85 / 20
- Fully admitted to Amirkabir University of Technology due to outstanding performance at Kharazmi University of Tehran.

#### Diploma in Mathematics

#### Kamal Highschool

m Oct 2012 - July 2014



#### Qualifications

• Cumulative GPA  $\sim$  19 / 20

## **RESEARCH INTERESTS**

- Visual Question Answering
- Image Captioning
- Image Style Transfer
- Generative Models
- Bio-medical Image Analysis
- Neuroscience of Vision

### RESEARCH EXPERIENCE

#### Tehran Polytechnic

#### Freelance Researcher

October 2017 - Ongoing

- **◊** Tehran, IR
- Analyzed formal representations of deep learning models in image style transfer.
- Explored and developed CNN and RNN architectures in visual question answering and image captioning tasks.
- Inspected statistical methods in face recognition.
- Implemented and accelerated image processing algorithms with CUDA.

### WORK EXPERIENCE

#### ArvanCloud

#### Web Developer

## Jun 2017 - Sep 2017

- ▼ Tehran, IR
- Designed and implemented an administrative panel using PHP and Laravel.
- Practiced the best coding styles in Javascript, especially Node.js and React.js.

#### Fandogh

#### **Mobile Developer**

- ▼ Tehran, IR
- Developed a poetry application with React Native.
- Designed and implemented of a pure android weather forecast application.

## **SELECTED COURSES**

Statistical Pattern RecognitionTBAMachine Learning19.5/20Foundations of Data Mining18.7/20Algorithm Design19.31/20Data Structures18.5/20Engineering Statistics18.5/20Engineering Mathematics19/20

#### SELECTED HONORS

#### Ranked top 5

among most active **GitHub** developers in Iran.



#### Ranked top 0.6%

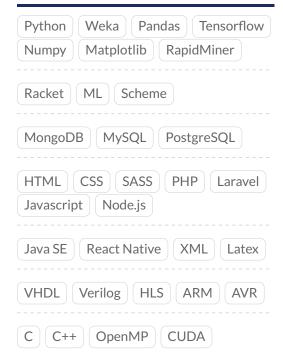
in the **nationwide** university entrance exam (approx. 250,000).



#### **Elected as tidiest**

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

## **PROGRAMMING SKILLS**



## **LANGUAGES**

Persian

#### **English**



Registered to take the TOEFL on August 4.

#### TEACHING EXPERIENCE

# Microprocessors and Assembly Language Supervisor: Prof. Mohammad Mahdi Homayounpour

M Sep 1017 - Dec 2017

**♀** Tehran, IR

## Foundations of Programming Supervisor: Prof. Azadeh Mansouri

▼ Tehran, IR

### **PUBLICATIONS**

#### 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.

#### 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). *Induction, Denotational Semantics and Lambda Calculus*. Available at: https://goo.gl/d3Jh6r.
- Gholami, Ali (2017f). *Introduction to Linear Algebra*, *Probability and Statistics*. Available at: https://goo.gl/uCUWDX.
- Gholami, Ali (2017g). Lisp, Garbage Collection and Higher-order Functions. Available at: https://goo.gl/KUEVkR.
- Gholami, Ali (2017h). *Parametric methods; Maximum Likelihood and Bayesian Parameter Estimation*. Available at: https://goo.gl/Mc9wfm.
- Gholami, Ali (2017i). *Polymorphism*, *Type Safety and Type Inference*. Available at: https://goo.gl/uGH48R.
- Gholami, Ali (2017j). *Types and Patterns in Algol and Meta Language*. Available at: https://goo.gl/6X3Sgy.

#### REFEREES

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