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 (AUT)

m Dec 2016 - Dec 2018

▼ Tehran, IR



Qualifications

- Cumulative GPA \sim 17.65 / 20
- Last 60 Units GPA \sim 17. / 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

Machine Learning Lab

Advisor: Prof. Mohammad Rahmati

- ▼ 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

- ▼ Tehran, IR
- Development of a poetry application with React Native.
- Design and implementation of a pure android weather forecast application.

SELECTED COURSES

Statistical Pattern Recognition	17/20
Machine Learning	19.5/20
Foundations of Data Mining	18.7/20
Algorithm Design	19.31/20
Data Structures	18.5/20
Engineering Statistics	18.5/20
Engineering Mathematics	19/20

SELECTED HONORS

Ranked top 5

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



Ranked top 0.6%

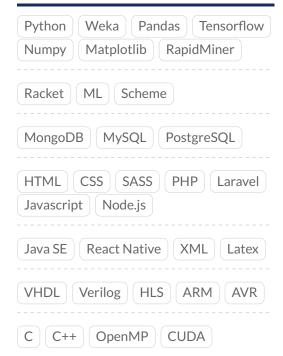
in the **nationwide** university entrance exam (approx. 250,000).



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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