Mohammad Doosti Lakhani

Computer Engineering Student

♣ +989379156599
No. 14, Golestan 3 Alley, Shahrdari Blvd, Karaj, 31998-45477 Iran

nikronic.github.io @ nikan.doosti@outlook.com



EDUCATION

University of Guilan

B.Sc in Software Engineering, GPA: 18.63/20

Ranked 3th in class- Transcript

Malek Ashtar High School

Pre-University Diploma in Mathematics, GPA: 19.60/20

May 2015

♥ Karaj, Iran

Malek Ashtar High School

Diploma in Mathematics and Physics Discipline, GPA: 19.50/20

♥ Karaj, Iran

WORK EXPERIENCES

Matrix Company

Member of Hardware Failure Team

₩ July 2016 - March 2018

▼ Tehran, Iran

I was working on assembling procedure and I and other members detect failures and repair them (Website).

TEACHING ASSISTANT EXPERIENCES

University of Guilan

Computational Intelligence

🛗 Sep 2018 - Feb 2019

Rasht, Iran

Instructor: Dr. M. Shakeri

My responsibilities were designing and assessment evolutionary algorithms projects and teaching Python programming language (Class Materials).

University of Guilan

Algorithms Design (2 times)

Sep 2017 - Jul 2018

Rasht, Iran

Instructor: Dr. M. Shakeri

My responsibility was assessment of student assignment.

HONORS AND AWARDS

- Ranked 3th in class
 - Present
- Full Scholarship, B.Sc, University of Guilan
 Aug 2015
- Ranked 1st in all years of high school
 2011 2015
- Exceptional Talent of
 Department of Computer
 Engineering University of Guilan
 2015
- Exceptional Talent of
 Department of Computer
 Engineering Iran University of
 Science and Technology
 2019

RESEARCH INTERESTS

Deep learning

Evolutionary Algorithms

Digital Image Processing

Computer Vision

Reinforcement Learning

SKILLS

Python
PyTorch
Git/VCS
Teamwork
Scipy
Sklearn
MS Office
Powershell
Windows

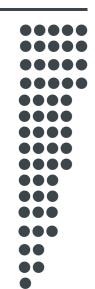
Linux VHDL

Tensorflow

SQL C++

Wolfram

Scala



University of Guilan

Advanced Programming TA

Feb 2018 - Jul 2018

Rasht, Iran

Instructor: Dr. S. A. Mirroshandel My responsibilities were as follow:

• Teaching GUI design, object-oriented and socket programming using java.

- Designing assignments.
- Assessment of student assignments.

LANGUAGES

Persian (Native) English



HOBBIES

Learning Cultures

Gaming

Music

COMMUNITY

School of AI - Rasht Chapter

Lecturer at School of AI

₩ Oct 2018

Rasht, Iran

I usually give lecture for student from different field of studies. I gave a lecture in last meet up and I scheduled other lectures for coming meetings.

The materials of these meetings can be found in here.

B.Sc FINAL PROJECT

"Deep Context-Aware Descreening and Rescreening of Halftone Images" Implementation

Tae-hoon Kim and Sang II Park. 2018. ACM Trans. DOI.

Supervisors:

- Dr. Mahdi Aminian University Of Guilan (Homepage)
- Dr. Vahid Babaei Max Planck Institute for Informatics (Homepage)

You can access different parts of implementations of this paper using below repositories:

- github.com/Nikronic/Places365-Preprocessing
- github.com/Nikronic/Halftone-Algorithms
- github.com/Nikronic/CoarseNet UNet (arxiv)
- github.com/Nikronic/ObjectNet PSPNet (arxiv)
- github.com/Nikronic/EdgeNet
- github.com/Nikronic/DetailsNet

In progress

CERTIFICATES

Deep Learning Specialization

Coursera, by Andrew Ng

Deep Learning Specialization consists of five different courses:

- Neural Networks and Deep Learning
- Improving Deep Neural Networks: Hyperparameter tuning Regularization and Optimization
- Structuring Machine Learning Projects
- Convolutional Neural Networks
- Sequence Models

In progress

REFERENCES

Dr. Mojtaba Shakeri

@ mojtaba_shakeri@SIMTech.a-star.edu.sg

4 (65) 6501 1800

Dr. Mahdi Aminian

@ mahdi.aminian@guilan.ac.ir

Dr. Seyed Abolghasem Mirroshandel

@ mirroshandel@guilan.ac.ir

Machine Learning Course Coursera, by Andrew Ng

₩ Nov 2018

Natural Language Processing

Coursera, by Higher School of Economics

Aug 2018

Deep Learning Summer School 2018 University of Tehran

SELECTED ACCOMPLISHED PROJECTS

- Optimized Multi-Depot Vehicle Routing Problem: The main idea of paper is to assign customers to specific depots and also assigning them an optimal route with respect to some constraints. We modified the proposed genetics method in reference paper and we have got better results. (Repo)
- Clustering Algorithms Based on Fuzzy Systems & Cohort Intelligence: In this study, we are trying to apply fuzzy systems to optimize hyperparameters of problem. The main idea of paper is to cluster data based on Cohort Intelligence (Genetics) and K-means clustering. (currently suspended)
- Coursera Machine Learning Course by Stanford Implementation using Python from scratch: In this project, I implemented all assignments in vectorized form using only Numpy library (Repo).
- Apply Different Machine Learning Models using SKlearn: I used SKlearn to fit different machine learning models on different tasks and showed the its usages (Repo).
- News Classification: Final project of Natural language processing course by University of Guilan (Repo).
- Music Recommender: Implemented with Python and it was the final project of Artificial Intelligence course.