HOSSEIN KHALILIAN GOURTANI

M.Sc. (Graduation date September 2021)

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EDUCATION

M.Sc. Computer Engineering (Artificial Intelligence)

📅 Sep 2018 – Sep 2021   📍 Amirkabir University of Technology, Tehran, Iran

- GPA: 3.87/4
  - 4th Rank among 53 Students
- Dissertation title: "Distributed Deep Learning for Big Data"
  - Advisor: Dr. Maryam Amir Haeri

B.Sc. Information Technology (Double Degree)

📅 Sep 2014 – Sep 2018   📍 Isfahan University of Technolog, Isfahan, Iran

- GPA: 3.88/4
  - 1st Rank among 75 Students

B.Sc. Electrical Engineering (Communication)

📅 Sep 2013 – Sep 2018   📍 Isfahan University of Technolog, Isfahan, Iran

- GPA: 3.88/4
  - Top 10% among 120 students
- Thesis: "Design and Implementation of VoIP Gateway"

RESEARCH INTERESTS

- Graph Neural Networks
- Deep Reinforcement Learning
- Large-Scale Machine Learning
- Natural Language Processing
- Deep Learning
- Mathematics
- Time Series
- Big Data
- Complex Networks

SELECTED COURSES

- Machine Learning
- Neural Networks
- Big Data Analytics
- Algorithms for Complex Networks
- Evolutionary Computing
- Convex Optimization
- Statistical Pattern Recognition
- Image Processing
- Databases
- Advanced Programming
- Data Structures
- Computer Networks

WORKING PAPERS

Evaluating Different Techniques of Reinforcement Learning and Graph Representation Learning for Device Placement Problem

TEACHING EXPERIENCE

Amirkabir University of Technology, Tehran, Iran

Teaching Assistant, Professor Nazerfard, Machine Learning

📅 February 2021 – July 2021

Developed syllabus and overall course structure, conducted students, and administered the grades

Isfahan University of Technology, Isfahan, Iran

Teaching Assistant, Professor Moayedian, Computer Networks

📅 March 2017 – July 2017

Developed syllabus and course structure, held question answering sessions, and administered the grades

Isfahan University of Technology, Isfahan, Iran

Lab Assistant, Professor Fanian, Computer Networks Lab

📅 September 2017 – Januery 2018

Developed lab instructions and overall lab structure, held lab sessions, mentored students and administered the grades

RESEARCH EXPERIENCE

📅 May 2021 – July 2021

- Liveness Detection using Knowledge Distillation for Anomaly Detection

📅 September 2019 – July 2021

- Solving Placement Problem for Deep Neural Networks using Deep Reinforcement Learning and Graph Representation Learning Techniques as master thesis

RELATED EXPERIENCE

Mom Center (Data Scientist)

📅 November 2021 – Current   📍 Tehran

- Improving Persian Automatic Speech Recognition Models
- Solving Item Matching Problem for Products using Vector Databases
- Developing News Article Recommender System
- Text Summarization and Keyboard Extraction using Sentence-Transformers
- Developing APIs for the Systems and Dockerizing Projects

Mofid Securities (Internship)

📅 April 2021 – July 2021   📍 Tehran

- Gathering, cleaning, and pre-processing data for training deep learning models
- Designing and training new models for anomaly detection in images
- Exporting and quantizing trained models for improving inference time
- Dockerizing projects and designing APIs for products

VOLUNTARY WORKS

- Senior Member and Head of Electrical Engineering Students Scientific Association (2016 & 2017)
- Member of organizing committee in IUT Startup Weekend (2015 & 2016)
- Teaching AVR for freshman students in electrical engineering department (2016)
- Member of organizing committee of Second Iranian Competition on Smart Grid (2016)

HONORS & AWARDS

- Admitted for master program at Amirkabir University of Technology and Isfahan University of Technology without entrance exam
- Awarded as an exceptional talent student and accepted for studying double major B.Sc. program at Isfahan University of Technology

PROFESSIONAL SKILLS

- Python (NumPy, Pandas, Transformers, Scikit-learn, gRPC)
- Machine Learning
- Natural Language Processing
- Automatic Speech Recognition
- Recommender Systems
- Semantic Search
- Deep Reinforcement Learning
- PyTorch & Tensorflow
- SQL & NoSQL
- Mathematics & Statistics
- Graph Algorithms
- Linear Algebra
- Data Visualization
- Git

LANGUAGES

- English (Proficient)
- Persian (Native)

REFERENCES

Dr. Maryam Amir Haeri
@ University of Twente
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Relation: Master thesis supervisor

Dr. Amir Hossein Payberah
@ KTH Royal Institute of Technology
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Relation: Master thesis advisor

Dr. Ehsan Nazerfard
@ Amirkabir University of Technology
✉ nazerfard@aut.ac.ir
Relation: Teacher Assistant