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EDUCATION

2020-2023	Master of Science in Artificial Intelligence & Robotics University of Tehran, Tehran, Iran GPA: 18.56/20 Ranked 31st among +14,000 participants in Computer Engineering nationwide test for Masters studies.
2015-2020	Bachelor of Science in Computer Engineering Isfahan University of Technology, Isfahan, Iran Last year GPA: 17.98/20

INTERESTS

Trustworthy AI - Theoretical ML/DL - Computer Vision - Causal learning

MANUSCRIPTS

SUBMITTED: *Y Deldjoo, M Varasteh, **YM Bahram**, MA Insabato, T Di Noia*
Fairness auditing through the lens of Counterfactual Explanations

UNDER PREPERATION: ***YM Bahram**, MA Sadeghi*
Overfitting is not a dead-end: A survey and outlook on post-training regularization

RESEARCH EXPERIENCE

External Research Collaboration 05/2022 - 01/2023	Polytechnic University of Bari Italy (Online) Dr. Yashar Deldjoo <ul style="list-style-type: none">Exploring fairness auditing via counterfactual explanations in classification models
Research Assistant 06/2021 - 08/2023	University of Tehran Computational Modeling & Machine Learning Lab Dr. Amin Sadeghi <p><i>Master Thesis:</i> When & where to perform regularization in training of deep models?</p> <ul style="list-style-type: none">Analyzing the implicit loss of learning image perturbations during model trainingRobustifying deep models to perturbations via post-training layer-wise invariance & equivariance regularizationsDevising a systematic review on the concept of post-training regularization
Research Intern 08/2019 - 02/2020	Isfahan University of Technology Hardware Design & Image Processing Lab Dr. Shadrokh Samavi <p><i>Bachelor Thesis:</i> Patched-Based CNN for Instance Segmentation of Pathology Images</p> <ul style="list-style-type: none">Investigating theoretical methods for optimization & implementation of deep learning architectures

TEACHING EXPERIENCE

Mentor 07/2022 - 08/2022	HooshBaaz Data Analytics Bootcamp  University of Tehran <ul style="list-style-type: none">Group collaboration with 7 other mentors for educating 80 students during 14 data science workshops
Teaching Assistant 07/2022 - 08/2022	Neuromatch Academy Deep Learning Summer School  USA (Online) <ul style="list-style-type: none">Selected as TA for full-time supervision on the learning of 16 students from different countries, & leading 2 research group projects during 3 weeks
Teaching Assistant 09/2021 - 02/2023	Graduate University Courses University of Tehran <ul style="list-style-type: none">Machine LearningDeep Generative Models (Lead)Advanced Deep LearningData Analytics & Visualization (Lead) <div>Dr. Mohammad-Reza Dehaqani Dr. Mostafa Tavassolipour Dr. Amin Sadeghi Dr. Amin Sadeghi</div>
Personal 01/2022	Publishing a free introductory ML course online   <ul style="list-style-type: none">Created over 2 hours of tutorials in Persian language with Hands-On exercises


HIGHLIGHTED PROJECTS

Freelance projects

Dr. Mostafa Tavassolipour


- Developing a system for analysis & prediction of Tehran Municipality's salary

Deep Learning projects on Git



- Trustworthiness (Robust Classification, Local Explanations)
- Generative models (BigBiGAN, InfoGAN, VQ-VAE, TWR VAE)
- Embeddings (Transfer Learning, Multimodal Classification, VQA)
- Self-supervised learning (Unsupervised representation learning, SimCLR, CPC, PixelCNN)

Data projects on Git



- Launching a real-time BigData system for monitoring, analysis, & prediction of Persian Tweets
- Spotify data crawling, analysis, & music recommendation
- NoSQL Databases (MongoDB, Neo4j, Cassandra, & Elasticsearch)
- Spark (text analysis, log-file mining, stock market analysis, Wikipedia analysis)



SELECTED COURSES

Trustworthy AI	18.3	Data Analytics & Visualization	17.25
Advanced Deep Learning	19.75	Big Data	18.9
Machine Learning	19.6	Database Design	18.5
Statistical Inference	18.4	Artificial Intelligence	20
Reinforcement Learning	17	Multimedia Systems	20

SKILLS

PROGRAMMING LANGUAGES	Python, R, C/C++
PYTHON FOR ML	NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn
DEEP LEARNING	Pytorch, Tensorflow
BIG DATA	SQL, NoSQL, Spark, Hadoop, Kafka
OTHER	Crawling, Linux, Docker, Git, LaTeX

LANGUAGES

ENGLISH:	110 TOEFL R28 L29 S26 W27 
	326 GRE Q167 V159 
PERSIAN & KURDISH:	Mother tongue