Hamid Nemati

in Hamid Nemati | ✉ nemati.hamid.1998@gmail.com | ⌂ hamid-nemati.github.io

Research Interests	I am broadly interested in: • Applied Machine Learning • AI in Finance, Economics, and Business • Business Technologies and Fintech • Social Networks • Trustworthy AI • Reinforcement Learning • Generative Models • Computer Vision • Big Data • Data Analytics

Education

M.Sc., Computer Science, University of Tehran   2021
(UT is the most Prestigious and the most Entrepreneurial university in Iran)

- Total GPA: 19.5/20 (4/4)
- 1st Rank for 3 Semester in a row
- Relevant Course Works:
    - Natural Language Processing (20/20)
    - Neural Networks (20/20)
    - Social Networks (20/20)
    - Machine Learning (19.2/20)
    - Statistical Inference (18.8/20)
    - Deep Generative Models (20/20)
    - Trustworthy AI (Attended as a Guest)
    - Data Analytics (Attended as a Guest)
    - Distributed Machine learning (Attended as a Guest)

2016

B.Sc., Computer Engineering, Isfahan University of Technology
(IUT is one of the most prestigious and the most non-indulgent university in Iran with lowest Average GPA)

2012

- Total GPA: 15/20 (3.2/4)

National Organization for Development of Exceptional Talents
DIPLOMA IN MATHEMATICS AND PHYSICS DISCIPLINE

- Total GPA: 20/20 (4/4)

Papers

"Enhancing Bitcoin Trend Forecasting by Incorporating Technical Analysis Tools into Chart Images" with Hesham Faili & Ahmad Kalhor (Submitted to **Expert Systems with Application**)

"Optimizing Miner Profit using Game Theory Optimization Methods and Deep Learning-based Financial Time Series Forecasting" with Kian Faroughi & Amir Hossein Nikoofard (Submitted to **Computers & Industrial Engineering**)

"Leveraging Multi-Representation Neural Network for Improving Financial Time Series Regression" with Hesham Faili (Submitted to **Journal of Forecasting**)

"Effect of Charting Technique Images on Cryptocurrency Trend Forecasting" with Hesham Faili & Ahmad Kalhor (Submitted to **Expert Systems with Application**)

"Persian-Fin-BERT: Persian Financial News Sentiment Analyzer" with Hesham Faili (Working Paper – Labeling More Data is Needed)

"Improving Reinforcement Learning Auto-Trader Performance with Chart Image" with Hesham Faili (Working Paper – More Backtesting is Needed)

"Meta Labeling for financial image datasets" With Sasan Barak (White Paper)

Awards and Honors	GRE - Quant: 160; Verbal 150; (without any preparation)	2023
	Created the largest Image dataset in timeseries forecasting	2023
	1st Rank for 3 Semester in a row in UT	2023
	Head of Stock Market Framework Team In UT	2022
	Ranked in top 0.1% in Konkur, MS Degree Entrance Exam, About 60,000 participants in Iran	2021
	Ranked in top 0.5% in Konkur, BS Degree Entrance Exam, Of all 148,429 participants in Iran	2016
	IUT Full Scholarship, as an exceptional talent	2016
	1st Rank for 4 years in a row in national organization for development of exceptional talents	2015
	Scoring over 140 on IQ test	2012
	1st Rank for 3 years in a row in middle school	2011
Teaching Assistantship	Statistical Inference, TA, Prof. Mohammadreza Abolghasemi Dehaqani, UT	2023-2
	Machine Learning, TA, Prof. Saman Harati-Zadeh, UT	2023-2
	Neural Network, TA, Prof. Ahmad Kalhor, UT	2023-2
	Advanced Algorithms, Chief TA, Prof. Hesham Faili, UT	2023-2
	Natural Language Processing, TA, Prof. Hesham Faili	2023-1
	Neural Network, TA, Prof. Ahmad Kalhor, UT	2023-1
	Statistical Inference, TA, Prof. A.H. Vahabi, UT	2023-1
	Statistical Inference, TA, Prof. Behnam Bahrak, UT	2022-2
	Digital Logic Circuits and Design, Prof. Nader Karimi, IUT	2017-2
	Advance programming lab, C++	2017-2
Work Experience	**AI Engineer,** (Iran Fara Bourse)	2023
	Data Science Intern, (Sharif Data Analytics)	2019
	Full Stack Developer, (Freelancing)	2018-20
	• Django, HTML, CSS, JavaScript	
	Network Administrator Help Desk, (High Web)	2017-18
	• CCNA, CCNP	
Research Experience	Remote Collaborator at University of Southampton Under supervision of Prof. Sasan Barak and Siavash Razmi	2023
	• Meta Labeling	
	Graduate Research Assistant at University of Tehran Under supervision of Prof. Hesham Faili and Prof. Masoud Asadpour	2022
	• Manger of Stock Market Auto-Trade Platform Team	
	• Stock Time Series Forecasting Using Chart Image	
	• Auto-Trading with Reinforcement Learning	
	• Summarizing and Teaching Surveys and Recent Papers Content To The members of Our Team	
	• Creating Tutorial on Stock Forecasting Fundamentals and necessary time series libraries for New Members of Our Team.	
	• Financial News Sentiment Analysis For https://8tag.ir/	

- Web Crawling News
- Crowd Sourcing Labels
- Training And Deploying NLP Models
- Supervising Undergraduate Students Thesis

Member of NLP Study Group
Under supervision of Prof. Yadollah Yaghoobzadeh

2022

- Summarizing and Teaching Surveys and Recent NLP Papers

Undergraduate Research Assistant at Isfahan University of Technology
Under supervision of Prof. Masoud-Reze Hashemi and

2019

- Hidden Markov Models, Part of Speech tagging with Forward-Backward, Viterbi and Baum-Welch Algorithm and boosting its performance by adding lexical regular expressions

2018

Undergraduate Research Assistant at Isfahan University of Technology
Under supervision of Prof. Majid Nabi

- The Effect of social media on teenagers and its relation with ADHD

Skills

Programming (C++, Java, Python, R, Logo, Octave, SQL)
Tools and Frameworks (PyTorch, Keras, Tensorflow, Huggingface, Transformers, Git, Darts, Sktime)
Traditional Time Series Forecasting Models (SARIMAX, VAR, GARCH)
Data Base (SQL Sever, SSIS, SSAS, Power BI)
Network (CCNA, CCNP, LPIC1, MCSE)
Technical Stock Analysis
Web Development
Web Crawling
Team Management and Team Work
Research

Language

Persian – Native language
Kurdish – Native language
English – Fluent (TOEFL Test score: 103/120, Speaking: 24, Writing: 27)
Spanish – Beginner

References

Hesham Faili, hfaili@ut.ac.ir
Ahmad Kalhor, akalhor@ut.ac.ir
Behnam Bahrak, Bahrak@ut.ac.ir
Yadollah Yaghoobzadeh, y.yaghoobzadeh@ut.ac.ir
Masoud Asadpour, asadpour@ut.ac.ir