




Hamid Nemati

 [Hamid Nemati](#) |  nemati.hamid.1998@gmail.com |  [hamid-nemati.github.io](https://github.com/hamid-nemati)

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)

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

2012

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**)

	<p>“Persian-Fin-BERT: Persian Financial News Sentiment Analyzer” with Hesham Faili (Working Paper – Labeling More Data is Needed)</p> <p>“Improving Reinforcement Learning Auto-Trader Performance with Chart Image” with Kian Faroughi & Amir Hossein Nikoofard & Hesham Faili (Working Paper – More Backtesting is Needed)</p> <p>“Meta Labeling for financial image datasets” With Sasan Barak (White Paper)</p>	
Awards and Honors	<p>GRE - Quant: 160; Verbal 150; (without any preparation) 2023</p> <p>Created the largest Image dataset in timeseries forecasting 2023</p> <p>1st Rank for 3 Semester in a row in UT 2023</p> <p>Head of Stock Market Framework Team In UT 2022</p> <p>Ranked in top 0.1% in Konkur, MS Degree Entrance Exam, About 60,000 participants in Iran 2021</p> <p>Ranked in top 0.5% in Konkur, BS Degree Entrance Exam, Of all 148,429 participants in Iran 2016</p> <p>IUT Full Scholarship, as an exceptional talent 2016</p> <p>1st Rank for 4 years in a row in national organization for development of exceptional talents 2015</p> <p>Scoring over 140 on IQ test 2012</p> <p>1st Rank for 3 years in a row in middle school 2011</p>	
Teaching Assistantship	<p>Statistical Inference, TA, Prof. Mohammadreza Abolghasemi Dehaqani, UT 2023-2</p> <p>Machine Learning, TA, Prof. Saman Harati-Zadeh, UT 2023-2</p> <p>Neural Network, TA, Prof. Ahmad Kalhor, UT 2023-2</p> <p>Advanced Algorithms, Chief TA, Prof. Hesham Faili, UT 2023-2</p> <p>Natural Language Processing, TA, Prof. Hesham Faili 2023-1</p> <p>Neural Network, TA, Prof. Ahmad Kalhor, UT 2023-1</p> <p>Statistical Inference, TA, Prof. A.H. Vahabi, UT 2023-1</p> <p>Statistical Inference, TA, Prof. Behnam Bahrak, UT 2022-2</p> <p>Digital Logic Circuits and Design, Prof. Nader Karimi, IUT 2017-2</p> <p>Advance programming lab, C++ 2017-2</p>	
Work Experience	<p>AI Engineer, (Iran Fara Bourse) 2023</p> <p>Data Science Intern, (Sharif Data Analytics) 2019</p> <p>Full Stack Developer, (Freelancing) 2018-20</p> <ul style="list-style-type: none"> Django, HTML, CSS, JavaScript <p>Network Administrator Help Desk, (High Web) 2017-18</p> <ul style="list-style-type: none"> CCNA, CCNP 	
Research Experience	<p>Remote Collaborator at University of Southampton 2023</p> <p>Under supervision of Prof. Sasan Barak and Siavash Razmi</p> <ul style="list-style-type: none"> Meta Labeling <p>Graduate Research Assistant at University of Tehran 2022</p> <p>Under supervision of Prof. Hesham Faili and Prof. Masoud Asadpour</p> <ul style="list-style-type: none"> 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. 	

	<ul style="list-style-type: none"> Financial News Sentiment Analysis For https://8tag.ir/ <ul style="list-style-type: none"> Web Crawling News Crowd Sourcing Labels Training And Deploying NLP Models Supervising Undergraduate Students Thesis 	2022
	<p>Member of NLP Study Group</p> <p>Under supervision of Prof. Yadollah Yaghoobzadeh</p> <ul style="list-style-type: none"> Summarizing and Teaching Surveys and Recent NLP Papers 	
	<p>Undergraduate Research Assistant at Isfahan University of Technology</p> <p>Under supervision of Prof. Masoud-Reze Hashemi and</p> <ul style="list-style-type: none"> Hidden Markov Models, Part of Speech tagging with Forward-Backward, Viterbi and Baum-Welch Algorithm and boosting its performance by adding lexical regular expressions 	2019
	<p>Undergraduate Research Assistant at Isfahan University of Technology</p> <p>Under supervision of Prof. Majid Nabi</p> <ul style="list-style-type: none"> The Effect of social media on teenagers and its relation with ADHD 	2018
Skills	<p>Programming (C++, Java, Python, R, Logo, Octave, SQL)</p> <p>Tools and Frameworks (PyTorch, Keras, Tensorflow, Huggingface, Transformers, Git, Darts, Sktime)</p> <p>Traditional Time Series Forecasting Models (SARIMAX, VAR, GARCH)</p> <p>Data Base (SQL Server, SSIS, SSAS, Power BI)</p> <p>Network (CCNA, CCNP, LPIC1, MCSE)</p> <p>Technical Stock Analysis</p> <p>Web Development</p> <p>Web Crawling</p> <p>Team Management and Team Work</p> <p>Research</p>	
Language	<p>Persian – Native language</p> <p>Kurdish – Native language</p> <p>English – Fluent (TOEFL Test score: 103/120, Speaking: 24, Writing: 27)</p> <p>Spanish – Beginner</p>	
References	<p>Hesham Faili, hfaili@ut.ac.ir</p> <p>Ahmad Kalhor, akalhor@ut.ac.ir</p> <p>Behnam Bahrak, Bahrak@ut.ac.ir</p> <p>Yadollah Yaghoobzadeh, y.yaghoobzadeh@ut.ac.ir</p> <p>Masoud Asadpour, asadpour@ut.ac.ir</p> <p>Mohammadreza Abolghasemi Dehaqani, dehaqani@ut.ac.ir</p> <p>Abdol-Hossein Vahabie, h.vahabie@ut.ac.ir</p>	