

ALI ELAHI

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EDUCATION

Master of Science Fall 2022 – Spring 2024

University of Illinois at Chicago [↗](#)

— **Computer Science** [↗](#)

Focused in Information Retrieval

— GPA: 4

Bachelor of Science 2017 – 2022

University of Tehran [↗](#)

— **Computer Engineering/Science** [↗](#)

Focused in Data Science

— GPA: 3.5

— **Mechanical Engineering** [↗](#)

— GPA: 3.2

Honors

— Bronze Medal in National Chemistry Olympiad

— Ranked within the Top 0.1% Nationwide University Entrance with 160K Participants

— Member of Iran's National Elites Foundation

COURSEWORK

Quantitative Finance (Currently)

Financial Markets (Currently)

Big Data Mining (A)

Computational Economics (A)

Information Retrieval (A)

Deep Learning & Applications (A)

Internet Engineering (A)

Reinforcement Learning (A)

PUBLICATIONS

Predicting Surface Water Bacteria Levels Using Domain Adaptation [↗](#) Under Submission

A Comparative Study of Recommendation Algorithms: Online and Offline Evaluations on a Large-scale Recommender System in Iran [↗](#) 2020

FIELDS OF INTERESTS

Analytical BA

Data Mining

Information Retrieval

Quant Finance/Econ

SKILLS

	Expert	Proficient	Familiar
General Tools	Word Excel PowerPoint Latex	sheets pages Keynotes	
Programming Languages/tools	Python R C++	SQL Java	Docker JS kubernetes
Data Science Tools	PyTorch Pandas SKlearn Numpy	TensorFlow Spark NLTK Matplotlib	
Software & Frameworks	Git Trello Jupyter Colab	Jira MongoDB PostgreSQL	HTML/CSS React JS Node JS

WORK HISTORY AND EXPERIENCES

University of Illinois at Chicago

September 2022 - now

Prof. Samuel Dorevitch [↗](#) **Prof. Cornelia Caragea** [↗](#)

— Data Scientist: Office Of Naval Research Grant - Semi-Supervised Domain Adaptation in Water Quality Prediction

Yektanet Co. [↗](#)

Summer 2020 - Winter 2021

— Business Analyst: Designing an advertisement bidding system - Clients' profitability analysis

— Data Scientist/Analyst: Development and Maintenance of a Large-Scale Recommendation-System

Treasurer @ Association of Computer Machinery (ACM) Student Chapter @ Uni of Tehran

Head Teaching Assistantship

Dr. Hakimeh Fadaei [↗](#), **Assis. prof. Ehsan Khamespanah** [↗](#)

— Artificial Intelligence, Internet Engineering, and Statistics Classes @ Uni of Tehran

NOTABLE ACADEMIC PROJECTS

Finance

- Security Price Time-series Analysis [↗](#)
Price Prediction Using Sequential ML Models (LSTM) - For SP500, BTC, AAPL
- Buy, Hold, or Sale? [↗](#)
Reinforcement Learning Model (MDP) for Trading Based on Next Day Price Prediction

Deep Learning

- English to Persian Machine Translation with Transformer - On 1 GB Corpus Using Pytorch [↗](#)
- Relation Extraction Task - SemEval Dataset Using Bi-LSTM Architecture Using Pytorch [↗](#)
- Image Captioning Model - Trained on Flickr8k - Convolutional + Bi-LSTM Using Pytorch [↗](#)
- Image Colorization - Stylization-based Architecture for Fast Deep Exemplar Colorization [↗](#)
- CCNN: Crowd Counting - via Multi-Column Convolutional Network Using pytorch [↗](#)
- SegNet: Pixel-Wise Semantic Segmentation [↗](#)
Deep Convolutional Encoder-Decoder for Robust Pixel-Wise Labelling Using Pytorch
- MLP Neural Network with Numpy on UTK Faces from Scratch! [↗](#)

Reinforcement Learning

- Markov Decision Process Profit Optimization - On-policy/Off-policy Monte-Carlo, Double Q-learning, Tree Back-up, SARSA and n-Step Expected SARSA [↗](#)
- Policy Iteration Algorithm for a Profit Maximization Problem [↗](#)
- Decision Making Using N-armed Bandit [↗](#)

Internet Engineering

- Development and Deployment of a Food Ordering and Delivery Website [↗](#)
Frameworks and Technologies: Spring, PostgreSQL, ReactJS, Docker, Kubernetes

REFERENCES

Prof. Cornelia Caragea [↗](#)

✉ Mail

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