

# ALI ELAHI

@ alielahi9956@gmail.com

@ aelahi6@uic.edu

alielahi.github.io

ae1999

alielahi99

allie.elahi

## 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

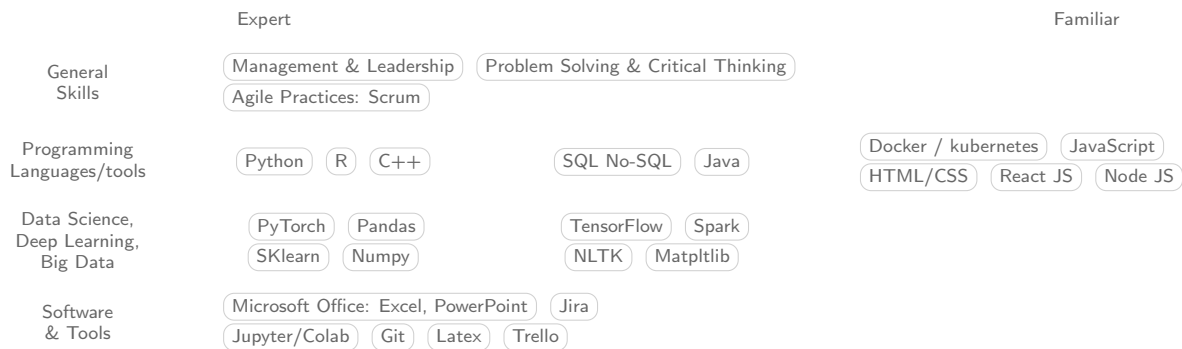
### Honors

— 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

## SKILLS



## 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

## 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

Leveraging Readily Available Web Data to Predict Surface Water Bacteria Levels Using Domain Adaptation [↗](#) 2023

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

## FIELDS OF INTERESTS

Quant Finance/Econ

Data Mining

Econometrics

Information Retrieval

# 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

Prof. Samuel Dorevitch [↗](#)

✉ Mail

Assis. prof. E. Khamespanah [↗](#)

✉ Mail

Dr. Hakimeh Fadaei [↗](#)

✉ Mail