

# Alireza (Sepehr) Ilami

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🌐 LinkedIn

🐙 Github

## Education

- 2023 – Present    📖 **Ph.D., Industrial Engineering**  
**Northeastern University** - Boston, MA, USA  
My primary research is on Complex Social Systems, mostly on how various large-scale policies can affect agents' rationales and decision-making processes.
- 2018 – 2023    📖 **B.Sc., Computer Engineering**  
**Sharif University of Technology** - Tehran, Iran

## Research Interests

- 📖 Complex Social Systems
- 📖 Network Science
- 📖 Human-AI Interactions
- 📖 System Dynamics

## Research Experience

- Jun 2022 - Sep 2022    📖 **Research Assistant, UC Berkeley** - CA, USA  
Supervisor: Prof. Niloufar Salehi, School of Information.  
Keywords: [Human-Computer Interaction, Online harassment]. I was working on Twitter data with quantitative and qualitative methods to understand how some users abuse and harass others, how both sides feel before and after the incident, and how we can stop these harmful actions and create a better internet society.
- Jun 2021 - Apr 2022    📖 **Research Assistant, EPFL** - Switzerland  
Supervisor: Prof. Alexandre Alahi, VITA lab.  
Keywords: [Computer Vision, Self-driving vehicles] I was primarily developing a framework to integrate multiple autonomous vehicle datasets to help the model learn more generally. I also worked on trajectory prediction using neural networks, causal inference, and theoretical methods.

## Publications

- Book Chapter    📖 **COVID-19 Diagnosis with Artificial Intelligence** R.G. Modegh, A. Salimi, S. Ilami, A.H. Dehqan, H. Dashti, S.H. Javanmard, H. Ghanaati, H.R. Rabiee.  
SPRINGER NATURE, 2022

## Teaching Assistant Experience

- 📖 **Scientific & Technical Presentation** SPRING 2022, FALL 2021, SPRING 2021
- 📖 **Discrete Structures** SPRING 2022, SPRING 2021
- 📖 **Artificial Intelligence** SPRING 2022
- 📖 **Linear Algebra** FALL 2020
- 📖 **Computer Structure and Language** SPRING 2021
- 📖 **Advanced Programming** SPRING 2020

## Work Experience

Feb 2021 - Jul 2022	■ <b>Human Resources Generalist, AI-MED</b> Recruitment process, interviewing with applicants, employee relations, company culture, etc.
Oct 2020 - Jul 2021	■ <b>R&amp;D Data Scientist, AI-MED</b> Medical Imaging, worked on CT & X-ray images for COVID-19 infection and lung cancer detection, using deep neural networks
Aug 2020 - Oct 2020	■ <b>Data Science Intern, AI-MED</b> Worked with CNN & DNN networks and GAN for image classification - worked with RNN for NLP

## Selected Courses (grade out of 20)

Game Theory	20	Artificial Intelligence	20	System Dynamics (MSc)	19.2
Technical Presentation	20	Eng Probability&Stat	20	Digital System Design	20
Adv Info Retrieval	19.6	Computer Simulation	19.6	Data Struct&Algo	18.8
Design of Algorithms	18.4	Discrete Structures	18.4	Numerical Computation	18.3

## Awards and Achievements

2018	■ <b>Rank 101st</b> Iran University Entrance Exam - in the top 0.1% (150000 participants)
2012 - 2015	■ <b>3 Silver and Bronze Medals</b> Iran Teenagers Math Olympiad (Middle School)

## Extracurricular Activities

2021	■ DataDays 2021 (Content Management Specialist)
2020	■ WSS 2020 (Manager and Director), DataDays 2020 (Scientific Staff),
2019	■ CSSS 2019 (Academic Mentor), ICPC 2019 (Executive Staff), WSS 2019 (Executive Staff),

## Skills

Languages	■ Python, R, Java, C++, C, HTML, CSS, Mips, Verilog, VHDL
ML Frameworks	■ PyTorch, NumPy, Pandas, OpenCV, Matplotlib
Tools	■ Vensim, ModelSim, Quartus, Proteus
Misc.	■ Git, Deep Learning, MySQL, L <sup>A</sup> T <sub>E</sub> X, Research, Leadership

## Languages

■ **English:** *Advanced (IELTS: 8 - L:9, R:9, W:6.5, S:7)* **Persian:** *Native* **Spanish:** *Elementary*

## Hobbies

■ Chess, Volleyball, Books, Movies, Social engagements