# Iman Khani Jazani

Al Scientist & Developer | Data Scientist | CS Lecturer

I am passionate about: Natural Language Processing, Machine Learning, Deep Learning, Data Science

#### **Education**

#### PH.D. | 2018-2019 | AMIRKABIR UNIVERSITY OF TECHNOLOGY- TEHRAN POLYTECHNIC

- · Field of Study: Computer Engineering (CE)- artificial intelligence and robotics
- · read about my reasons for withdrawal in my LinkedIn

## M.SC. | 2015-2018 | AMIRKABIR UNIVERSITY OF TECHNOLOGY- TEHRAN POLYTECHNIC

- · Field of Study: Computer Engineering (CE)- artificial intelligence and robotics
- · **GPA:** 18.23/20 (3.88/4)
- · Thesis: Improvement in Spoken Term Detection Systems using Supervised and Unsupervised Techniques and Semantic Knowledge
  - o **Supervisor:** Dr. Mohammad Mehdi Homayounpour
  - o **Score:** 20/20

## **B.SC.** | 2010-2015 | TEHRAN UNIVERSITY

- · Field of Study: Computer Science (CS)
- GPA: 17.38/20 (3.64/4)
- · Thesis: Persian Question Answering System with Emphasis of Question Classification and Answer Extraction
  - o **Supervisor:** Dr. Hedieh Sajedi
  - o Score: 20/20

# **Some Industrial Experiences**

- · Director of voice processing group, Arman Rayan Sharif, Tehran, Iran, July 2018-2020.
  - O Tasks: Persian automatic speech recognition, text to speech, audio classification, speaker gender detection, speaker diarization, ...
- · Co-founder of NeoAI research and technology center, Tehran, Iran, 2018-2022.
  - O About: Text, audio, and image processing APIs are available on this platform (www.AIPAA.ir)
- Project manager, supervisor, and evaluator of vice-presidency for science and technology of Iran, 2020-2022.
  - O Main achivment: the first Persian chit-chat corpus was created in this project (<u>www.peivast.com/p/106085</u>)
- · AI-Tech lead and researcher at Sharif Policy Research Instuite, Sharif university of technology, Tehran, Iran, 2021-2022.
  - O About: machine vision-based content moderation for Iranian VODs for kids
- AI consultant, National and international componies, 2020- present.
  - O Topics: speaker identification, audio classification, deep fake, ...
- · AI-Tech lead and co-founder, RecoTech, 2021- present.
  - $\bigcirc \ \ \textit{About: an intelligent device for fashion recommender}$
- Technical product manager and NLP team lead, Mehra, Tehran, Iran, 2022-present.
  - ${\tt \bigcirc} \quad \textit{Tasks: speech analysis, speech generation, chat bot, project management, user need analysis, ...}$
- · Senior data scientist, Adin, Tehran, Iran, 2022-peresent.
  - $\circ$  Tasks: user log history analysis, trip analysis, user profiling, negotiation, team building, ...
- · R&D manager of Adayapp, Istanbul, Turkey, 2023-present.

#### **Some Academic Activities**

- · Co-supervisor of two undergraduate students (in NLP oriented topics), Amirkabir university of technology, 2017-2018.
- · Research asistant, LIMP, Amirkabir university of technology, 2017-2018.
- · Co-Lecturer, College of engeenering, Tehran university, 2019.
- · Sub-reviewer, 9th International conference on information and knowledge technology, Amirkabir university of technology, 2017.
- · Journal reviewer, Journal of experimental and theoretical artificial intelligence, Taylor & Francis Group, 2020-present.
- $\cdot \quad \text{Journal reviewer, Transactions on audio speech and language processing, IEEE/ACM, 2021-present.}$
- · Adjunct professor, Department of computer engineering, Sharif university of technology, 2023-present.

# **Honors and Awards**

- · Ranked #3 among all bachelor computer science students, university of Tehran, 2015.
- · Ranked #3 among all master students in AI, Amirkabir university of technology, 2018.
- · Ranked #10 among about 1000 competitors of national M.Sc. university entrance exam in computer science, 2015.
- · Ranked #69 among about 13000 competitors of national M.Sc. university entrance exam in computer engineering, 2015.
- Accepted BSc project's idea (for Jooya question answering system) at University of Tehran Science and Technology Park among 200 B.Sc., M.Sc. and PhD thesis and receiving proof of concept (POC), 2016.
- · Ranked #3 among about 200 ideas in VCCUP Sharif university of technology, 2017.
- · Ranked %1 among about 260,000 competitors of national B.Sc. university entrance exam in Math and Physics, 2015.
- · Accepted startup in Fashion Recommender, Schoolab, France, 2022.

# **Some Teaching Assistant and Lecturer Experiences**

- · International M.Sc. students, "Statistical Natural Language Processing", Amirkabir university of technology, 2017.
- · M.Sc. and PhD students, "Machine Learning", Tehran university, 2017, 2019.
- · B.Sc. students, "Artificial Intelligence", Tehran university, 2015.
- · B.Sc. students, "Compiler Design and Implementation", Tehran university, 2014 and 2015.
- · Lecturer, "Introduction to Deep Neural Network and Word Embedding", One-Day Seminar in Deep NLP, Amirkabir university of technology, 2018.
- · Lecturer, "GANs and its Application in Text Mining", Monthly Seminar NLP, Amirkabir university of technology, 2017.
- · Lecturer, "Introduction to Neural Networks and Deep Learning", Neuroscience Club, Tehran university, 2018.
- · Lecturer, "Machine Learning with Python", AI Lessons (opensource and free learning in AI for beginners), 2020.
- · Lecturer, "Speech Processing", Hamrah Aval Academy, 2022.

#### **Publications**

- · Iman Khani Jazani, Hedieh Sajedi, "Jooya: A Persian Question Answering System", Computing Science Journal, 2016.
- · Mohammad Razzaghnouri, Hedieh Sajedi, **Iman Khani Jazani**, "Question Classification in Persian using Word Vectors and Frequencies", Cognitive System Research Journal, 2018.
- · Saeedeh Momtazi, Arman Rahbar, Dariush Salami, **Iman Khani Jazani**, "A Joint Semantic Vector Representation Model for Text Clustering and Classification", Journal of AI and Data mining, 2019.
- · Sayeh Mirzaai, Iman Khani Jazani, "Acoustic Scene Classification with Multi-Temporal Complex Modulation Spectrogram Features and Convolutional LSTM Network", Multimedia Tools and Applications, 2022.
- · Iman Khani Jazani, ..., "Transformer-based Paraphrase Generation with the Help of ...". In Progress, 2023.

## Few Projects (for other projects, please contact me!)

- · Deep spiking neural network for auditory modeling based on Izhikevich neuron and STDP learning with Python
- $\cdot \ \textit{Representation learning} \ \text{in deep spiking neural networks with supervised learning-surrogate gradient methods}.$
- · *Spoken document retrieval system* with Python and Tensorflow which is based on deep networks that combination of autoencoder and adversarial learning was used for training phase.
- Text To Speech (TTS) system based on cascade modeling (lots of NLP methods for text processing and understanding) and unit-selection approach + deep learning approach which were implemented with Python.
- · Question classification with recurrent neural networks, multi-layer perceptron, traditional machine learning methods approach which was implemented with Python.
- · Price prediction for FMCGs with tree-based models.

# **Some Programming Skills**

**Programming languages:** Python, Matlab, C/C++, Java, Prolog

Machine learning oriented libraries and tools: PyTorch, Tensorflow, Keras, Scikit-learn, Pandas, Numpy

Data Bases: SQL(MySQL), No-SQL (MongoDb)

**Development, testing, and deployment tools:** Git, Docker, FastAPI

Project Management Tools: Trello, Jira, Clickup