

EDUCATION

Institute for Advanced Studies in Basic Sciences (IASBS).

Zanjan, Iran

MSc in Artificial Intelligence, GPA: 16.72/20.00

2019–2023

- Thesis: “Firefighting with Autonomous UAVs using Deep Reinforcement Learning”
- Supervisors: Dr. Mohsen Afsharchi, Dr. Mohsen Hooshmand

Institute for Advanced Studies in Basic Sciences (IASBS).

Zanjan, Iran

B.S. in Information Technology (IT), GPA: 15.94/20.00

2014–2018

- Thesis: “Designing and Implementing A Mobile Phone System to Remind when to Take Medicine”
- Supervisor: Dr. Ebrahim Ansari

RESEARCH INTERESTS

- Machine Learning
- Reinforcement Learning
- Multi Agent Reinforcement Learning
- Graph Neural Networks

PUBLICATIONS

- [1] R. Shami Tanha, M. Sadighian, A. Zabihian, M. Hooshmand, and M. Afsharchi, “MAD-TI: Meta-path aggregated-graph attention network for drug target interaction prediction”, presented at the 2023 31st International Conference on Electrical Engineering (ICEE), 2023.
- [2] A. Zabihian, F. Z. Sayyad, S. M. Hashemi, R. Shami Tanha, M. Hooshmand, and S. Gharaghani, “DEDTI vs IEDTI: Efficient and predictive models of drug-target interactions”, *Scientific Reports*, vol. 13, pp. 1–18, 2023. [Online]. Available: <https://doi.org/10.1038/s41598-023-36438-0>.

RELEVANT GRADUATE COURSES PASSED

- **Machine Learning**, 2020
 - Bishop, Christopher M. (2006). “Pattern recognition and machine learning”. New York :Springer,
- **Advanced Data Mining**, 2020
 - Han, J., Kamber, M. & Pei, J. (2012). “Data mining concepts and techniques”, third edition Morgan
- **Deep Learning**, 2020
 - Bengio, Y. (2016). “Deep Learning”. MIT Press.
- **Advanced Artificial Intelligence**, 2019
 - Russell S. J. & Norvig P. (2010). “Artificial intelligence : a modern approach (3rd ed.)”. Pearson.
- **Multi Agent Systems**, 2020
 - Wooldridge, M. (2009). “An introduction to multiagent systems”. John wiley & sons.

EXPERIENCES

- **Research Assistant** at IASBS, Departemant of Computer Sciences and IT May 2023 - August 2023
Supervisor: Dr. Mohsen Hooshmand
- **Freelancer Website Developer** January 2023 - April 2023
Develop and maintain an online questionnaire website, online.iran.liara.run

TEACHING

- **Teaching Assistant** at IASBS, Departemant of Computer Sciences and IT Fall 2022
Course name: Reinforcement Learning, Teacher: Dr. Mohsen Hooshmand
- **Teaching Assistant** at IASBS, Departemant of Computer Sciences and IT Winter 2022
Course name: Advanced Data Mining, Teacher: Dr. Zahra Narimani
- **Teaching Assistant** at IASBS, Departemant of Computer Sciences and IT Winter 2021
Course name: Multi Agent Systems, Teacher: Dr. Mohsen Afsharchi
- **Teaching Assistant** at IASBS, Departemant of Computer Sciences and IT Spring 2017
Course name: Advanced Programming, Teacher: Dr. Ebrahim Ansari
- **Teaching Assistant** at IASBS, Departemant of Computer Sciences and IT Winter 2016
Course name: Data Structures, Teacher: Dr. Mehdi Khosravian
- **Teaching Assistant** at IASBS, Departemant of Computer Sciences and IT Fall 2015
Course name: Basic Programming, Teacher: Dr. Ebrahim Ansari

COMPUTER SKILLS

Programming languages:

- C++ (expert)
- Python (expert)
- JavaScript (experienced)
- Java (good knowledge)

Back-End:

- Node.JS (experienced)
- Express.JS (experienced)
- PHP (experienced)
- XAMP (experienced)

Databases:

- MongoDB (good knowledge)
- MySQL (experienced)

Operation Systems:

- Linux
- Windows

Machine Learning and Deep Learning:

- PyTorch, TensorFlow
- NumPy, SciPy, Keras, Pandas
- Matplotlib

Front-End:

- Html, CSS, JavaScript (experienced)
- Bootstrap (experienced)
- jQuery (experienced)

Scientific software:

- MATLAB (experienced)

Others:

- \LaTeX (good knowledge)
- Heroku (good knowledge)
- Git (experienced)
- Express JS and mongoose libraries in Node.JS

LANGUAGE SKILLS

- **Persian:** Native
- **Azari:** Native
- **English:** Intermediate

CONFERENCES AND SEMINARS ATTENDED

- Computational methods for modelling bionano interactions and nanomaterials functionality workshop (26 –28 June2023, CECAM-IRL-Online), <https://www.cecarn.org/workshop-details/1231>
- 31st International Conference on Electrical Engineering (ICEE) (9–11 MAY 2023, Electrical Engineering Department, Amirkabir University of Technology), <https://iceeconr.ir/2023>
- Fifth IPM Advanced School On Computing & Artificial Intelligence (5–8 SEP 2021, Online)
- PyTorch Workshop (4–7 SEP 2021, Computer Science Department, IASBS)

INTERESTS AND HOBBIES

- Reading books
- Traveling

REFERENCES

- **Dr. Mohsen Hooshmand**
Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran
Assistant Professor
 - Thesis supervisor
 - Email: mohsen.hooshmand@iasbs.ac.ir
 - Website: <https://iasbs.ac.ir/~mohsen.hooshmand>
- **Dr. Zahra Narimani**
Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan, Iran
Assistant Professor
 - Email: narimani@iasbs.ac.ir
 - Website: <https://iasbs.ac.ir/~narimani>