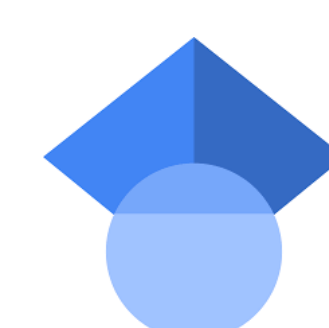




Marzieh Khodadadi



[Google Scholar](#)



[LinkedIn](#)



marzieh.khodadadi.a@gmail.com

Affiliation : Laboratory of Bioinformatics and Drug Design,
Institute of Biochemistry and Biophysics, University of Tehran

- Marzieh is a researcher specializing in bioinformatics, computational biology, and artificial intelligence-driven approaches for drug discovery. She received her M.Sc. degree in Chemical Engineering (Pharmaceutics) from the University of Tehran, achieving the top rank in her master's program. Her graduate research focused on the development of knowledge graph-based frameworks for drug repurposing using deep learning approaches.
- She is currently a Research Assistant at the Laboratory of Bioinformatics and Drug Design, Institute of Biochemistry and Biophysics, University of Tehran. Her research focuses on biomedical knowledge graph construction, graph representation learning, graph neural networks, explainable artificial intelligence, and computational drug discovery. She has experience in integrating heterogeneous biological datasets, developing biomedical knowledge graph and applying deep learning models for drug repurposing prediction.
- Her computational expertise includes machine learning and deep learning frameworks such as PyTorch Geometric, TensorFlow, and Scikit-learn, as well as Python-based data analysis, graph algorithms, molecular docking, and computational validation approaches using AutoDock Vina and AutoDock4. She has experience with a range of deep learning architectures, including convolutional neural networks (CNNs), graph neural networks (GNNs), heterogeneous graph neural networks (HGNNs/HGNNs), recurrent neural networks (RNNs), autoencoders, and variational autoencoders (VAEs) for computational biology applications. She has also worked with gene expression datasets and multi-omics data integration, including the application of deep generative models for cross-modal biological data generation.
- Her current research interests include explainable AI for knowledge graph-based drug repurposing, graph neural networks, biomedical knowledge representation, multi-omics integration, and personalized computational drug discovery.