Amir H. Malekijoo

Résumé

✆ (+98) 9383211689
✉ amirhossein.maleki1990@gmail.com
✍ LinkedIn: amirhmalekijoo1990

Educations

2021–2022	**Research Assistant at IS department**, *University of Maryland, BC, MA, USA*.
2015–2019	**MSc. in Computer Engineering -AI and Robotics**, *Semnan University, Semnan, Iran*.
2010–2015	**BSc. in Computer Engineering -Software**, *Tehran Azad University (IAU), Teh, Iran*.

Areas of Interest

Interactive AI/ML, Pattern Recognition, Generative AI

Deep Learning, Reinforcement Learning, Decision Making Theory

Self-Learning, Knowledge Representation, Multi-Objective Problems, Optimization

Human-Computer Interaction, Virtual Reality (VR) and Augmented Reality (AR)

Links

○ **Google Scholar** ○ **GitHub**

Publication

Amir H. Malekijoo, S. Mehrkian "Text Sentiment Analyses and its Influence on predicting stock shares with Deep Learning".*(ongoing, approximate submit date, May 2025)*

Amir H. Malekijoo, "Computation Offloading with Lyapunov-guided Deep PPO ".*(ongoing, approximate submit date, March 2025)*

M. Dashti, M. A. Habibi, N. Nejati, B. Robat-Jazi, M. Ahmadpur, A. Rezaei Nejad, **Amir H. Malekijoo**, F. Jadidi-Niaragh, "Clinical Efficacy and Safety of CD7-Targeted CAR T Cell Therapy for T-cell Malignancies: A Systematic Review and Meta-analysis", *Anti-Cancer Agents in Medicinal Chemistry*; Volume 24, Issue, Year 2024, e18715206321313. DOI: 10.2174/0118715206321313240820101412

M. Dashti, M. A. Habibi, N. Nejati, B. Robat-Jazi, M. Ahmadpur, N. Dokhani, A. Rezaei Nejad, S. Karami, E. Alinejad, **Amir H. Malekijoo**, A. Ghasemzadeh, F. Jadidi-Niaragh, "Clinical Efficacy and Safety of Pembrolizumab Therapy for B-cell Lymphoma: A Systematic Review and Meta-analysis", July 2024, *Submitted to Reviews on Recent Clinical Trials*

H. Malekijou, V. Hakami, N. Taheri Javan, **Amir H. Malekijoo**, "Q-Learning-Based Algorithms for Dynamic Transmission Control in IoT Equipment with Rechargeable Battery," *The Journal of Supercomputing 79 (1), 75-108*

Amir H. Malekijoo, M.Fadaeieslam, H. Malekijou, M. Homayounfar, Farshid Alizadeh-Shabdiz, and R. Rawassizadeh. "FedZip: A Compression Framework for Communication Efficient Federated Learning." (*Revised in Applied Intelligence Journal, Dec 2021*) PrePrint Version

M. Homayounfar, **Amir H. Malekijoo**, A. Visuri, C. Dobbins, E. Peltonen, E. Pinksy, K. Teymourian, and R. Rawassizadeh. "Understanding Smartwatch Battery Utilization in the Wild," *Sensors* 2020, *20*, 3784. Journal Link

Amir H. Malekijoo, M. Fadaeieslam, " Convolution-Deconvolution Architecture with Pyramid Pooling Module for semantic segmentation," *Multimedia Tools and Application*, Multimed Tools Appl 78, 32379–32392, 2019. [Journal Link]

Job Positions

Sept 2022 Present	**Coaching and Mentoring**, *Instruct junior developers and Bs./Ms. students.*, As a coach, I counsel, plan for, and guide coachees to achieve personal and professional goals. ○ Designing plans and guidelines ○ Setting specific goals ○ Probing and Suggesting ○ Leading counseling session
Jan 2022 Mar 2022	**Developer**, *TECVICO, Vancouver, Canada*, Developing Custom Web App for the start-up and AI projects. ○ Writing Tutorials ○ Developing a Web App and Software Testing ○ Data Mining and working with Big Data
Jun 2019 Present	**Part-time Developer**, *Apply Group Co., Tehran, Iran*, Developing Web Site Apps / Developing AI/ML projects. ○ Developing a Web App and Software Testing ○ Advising for AI/ML scientific research approach ○ Managing and Team Lead
Sep 2018 Jan 2019	**Developer - NLP and Text2Speech** , *Tejarat Electronic Arman Mashahir, Teh, Iran*. Working under a leading startup in the area of online games. ○ Implementing AI/ML models. ○ Designing and running smart models. ○ Providing an CONVERSATIONAL AGENT IN PERSIAN. ○ Designing the agent with two modules. Speech-to-text, Text-to-speech ○ Working with real-world problems on real-world datasets
Aug 2014 Present	**Computer Engineer (CE)**, *Barg Sabz Mehr Damavand Co., Teh, Iran*. Develop a data analyzer program for Sales and Purchase Department ○ Designing a Comprehensive smart program to predict the sales demand and purchase volume. ○ Analyzing the data with modern algorithms. ○ Web Developing
Oct 2011 April 2012	**Computer Engineer - Network (IT)**, *Simia Pardazeshgar Gharb Co., Teh, Iran*. improving design skills, gaining team-work experiences, and problem-solving. ○ Design different active and passive Networks ○ troubleshot and diagnose the occurred problems for clients
Sep 2010 Aug 2014	**Computer Engineer (CE)**, *Barg Sabze Persian Co, Teh, Iran*. Gathering requirements, and designing a digital system for the company ○ Designing and implementing Network system ○ Designing and implementing Security System ○ Teaching and Supporting Integrated Accounting Software for employees

Some of the Freelancing Projects

○ AI trader Bot in MQL5 (RLs)
○ Web Scraping for extracting Big Data
○ implementing YOLOv5 and YOLOv7
○ implementing Telegram Game Bot
○ Earthquake Detector

○ LSTMs for Persian Speech Recognition
○ Fault detection for a Production Factory
○ Text To Speech Agent
○ Persian Speech to Text Agent
○ Running Chauffer Datasets

- Image Translation using GANs
- Image Processing, Semantic Segmentation
- Numerous Web Sites back-front developing
- implementing Fuzzy AHP, TOPSIS, IPA
- OCR for Persian Language
- Humaniod Robotic, NLP part
- Video Object Detection
- Implementing NSGA2
- Complex problems
- Digital Twin

Technical Skills

Programming Languages
- **Python, C/C++, MATLAB Java, JavaScript, R**

3D Development Platforms
- Unity(beginner), AR/VR (beginner)

DL and LLMs Experiences
- FeedForward   MLPs
- CNNs   FCN, GoogleNet, P-DecovNet
  .   VGG, YOLO, Attention CNN
- RNNs   LSTMs
- GANs   CycleGANs,
  .   Adversarial Autoencoder
- RLs   PolicyGradient, Q-Learning
- FLs   FedAvg, FedSgd, FedZip
- Transformers   AutoEncoders

ML Libraries
- **TensorFlow, Keras, PyTorch**
  . MATLAB DNN Toolbox

Web Library
- Rest APIs, Flask, Bootstrap

Tools
- Docker, Images, Containers
- OpenAI Gym, ROS
- Linux, OS X, Windows

Scientific Libraries
- NumPy, Pandas, Scipy
- mlpack, OpenCv, Sklearn
- RegEx, NLTK, NeuroKit
- MatPlotLib, BeautifulSoup,

Languages
- Persian (Native), English (Advance)

Certificates
- C++ Programming Certificates
- Python Programming Certificates
- Microsoft Certified IT Professional (MCITP)
- Cisco Certified Network Associate (CCNA) and (CCNP - Route)

Personal Interests
- Tree Planting, Traveling
- Soccer, Swimming, Fitness