Fariba Noorighomesheh

Phone: +393500400421 (mobile)
E-mail: noorighomesheh.1958130@studenti.uniroma1.it
E-mail: noori.fariba70@gmail.com
Address: via curzo rufo, 33, 00174, Roma, Italy

Education:

M.Sc. 2021 − 2024 **Razi University**
Rome, Italy
Major: **Engineering in Computer Science**, **GPA: 3.6(Range 4)**
Thesis: _"Design and Evaluation of a Scalable Multimodal Framework for the Analysis of Travel Experiences"_
Thesis Advisor: Prof. Aris Anagnostopoulos
Co-Advisor: Prof. Ioannis Chatzigiannakis

M.Sc. 2014 − 2016 **Razi University**
Kermanshah, Iran
Major: **Computer Software Engineering**, **GPA: 3.78 (Range 4)**
Thesis: _"An Adaptive Color Change of User-interface Based on User's Mood and Emotion"_
Supervisor: Dr. Mohammad Kazemifard
Advisor: Dr. Jahangir Karami

B.Sc. 2009 − 2013 **Razi University**
Kermanshah, Iran
Major: **Computer Software Engineering**, **GPA: 3.22 (Range 4)**
Thesis: _"Simulation of Pair Programming in Multi-Agent environment"_
Supervisor: Dr. Mohammad Kazemifard

Experience:

- Lecturer, Introduction to C++ Programming (BS) Lab, Razi University, Kermanshah, Iran **(February 2019-September 2020)**
- Lecturer, Advanced Programming (BS) Lab, Razi University, Kermanshah, Iran **(February 2019-September 2020)**
- Lecturer, Design and Programming Language, Razi University, Kermanshah, Iran **(February 2019-September 2020)**
- Head of Human Computer Interaction laboratory, Razi University, Kermanshah, Iran **(February 2019-September 2020)**
- Senior Full Stack Developer, Shenakht Company (A cognitive accelerator), Kermanshah, Iran **(August 2015-August 2019)**

Research Interests:

Machine Learning, Multimodal Data Analysis, Data Mining, Natural Language Processing (NLP), Large Language Models (LLMs), Internet of Things, Data Science, Human-Computer Interaction, Expert System, Adaptive/ Personalized Systems, Affective Computing, Computational Cognitive Modeling, Agents with Emotion Understanding Ability, Brain Computer Interface, Signal Processing, Blockchain.

Awards:

1. Ranked top 1% M.Sc. graduate **(GPA: 3.78)(Range 1-4)**, Computer Software Engineering, Razi University, Kermanshah, Iran **(2014-2016)**.
2. Outstanding Student Scholarship for a Master's degree, Razi University **(2014)**.

3. Ranked top 5% B.Sc. graduate **(GPA: 3.22)(Range 1-4)**, Computer Software Engineering, Razi University, Kermanshah, Iran **(2009-2013)**.

4. Winner of the 13th National Skill Competition, Kermanshah, Iran **(2013)**.

Publications:

Books

1. **F. Noori**, M. Kazemifard, A. Parvizi, A. Mohammadi, and M. Rahmani, "Concept of programming Language", English Author: Robert W. Sebesta, *Translated to Persian, Razi University Press, ISBN: 978-600-393-023-0, August 2018.*

Journal articles

1. **F. Noori**, and M. Kazemifard, "AUBUE An Adaptive User-Interface Based on Users Emotions", in *Journal of Computing and Security, Volume 3, No. 2, April, 2016*

2. T.I. O¨ren, M. Kazemifard, and **F. Noori**, "Agents with four categories of understanding abilities and their role in two-stage (deep) emotional intelligence simulation", in *International Journal of Modeling, Simulation, and Scientific Computing (IJMSSC), Volume 6, No. 3, 2015.*

Conference proceedings

1. **F. Noori**, M. Kazemifard, and J. Karami, "An Addaptive Color Change of User-Interface Based on User's Mood and Emotion, Using Memory-based System ", in *12th International Conferences on Engineering & Technology, Oslo & Norway, June, 2019.*

2. **F. Noori**, M. Kazemifard, and J. Karami, "Control the emotion based on color of user-interface memory-based", *In 4th international Conference on Modern Studies in Computer Science & IT, Iran, February, 2018, (Persian).*

3. **F. Noori**, and M. Kazemifard, "Adapting User Interface Color in Shape Gusseing Game based on Mood and Emotion of Users", *In Proceedings of First National Conference on Computer Games Challenges Opertunities, Iran, September, 2016, (Persian).*

4. H. Mohebian, M. Kazemifard, and **F. Noori**, "Personality and Mood detection of Users Playing Game with Touch Screen", *In Proceedings of First National Conference on Computer Games Challenges Opertunities, Iran, September, 2016, (Persian).*

5. T.I. Oren, L. Yilmaz, N. Ghasem-Aghaee, M. Kazemifard, and **F. Noori**, "Machine Understanding in Agent-Directed Simulation: State-of-the-art and Research Directions", in *(Keynote article of the 2016 Modeling and Simulation of Complexity in Intelligent, Adaptive and Autonomous Systems (MSCIAAS) Symposium of the SpringSim'16), Proceedings of the SpringSim'16, Umut Durak and Murat Günal, (eds.), April 3-6, 2016, Pasadena, CA, (SCS – The Society for Modeling and Simulation International), San Diego, USA, April, 2016.*

6. **F. Noori**, and M. Kazemifard, "Simulation of Pair Programming using Multi-Agent and MBTI Personality Model", *In Proceeding of the 6th International Conference of Cognitive Science (ICCS), Iran, 2015 (Published by IEEE).*

7. **F. Noori**, S. Shamsizadeh, and M. Kazemifard, "Design a University web site by considering Users' Emotion and Using Kansei Engineering", *In Proceeding of the 6th International Conference of Cognitive Science (ICCS), Iran, 2015 (Published by IEEE).*

Some Project Experiences:

- **Multimodal Analyzer:** A tool for analyzing multimodal data (text, image) to compute similarity and misalignment. Used models like CLIP and MarianMT for image-caption analysis.

- Senior frontend developer and Scrum master, **Refinery Software**, software for sale management of refinery petroleum products, there are in internal private network, **(September 2018-present)**.

- Senior frontend developer and Scrum master, **Tocamlm**, TOCA network marketing business site (https://tocamlm.ir), **(August 2018-present)**.

- Senior frontend developer, **Painting**, a painting application for children (Android and Management panel), **(April 2018- February 2019)**.

- Senior full stack developer and R&D, **RahnamaTel**, an international travel guide application (Android & IOS) for assistance of tourist by internet call to leader's app and other features (http://rahnamatel.com), **(December 2017-July 2018)**.

- Senior frontend developer, Senior analyser and Scrum master, **Neuro Advise**, an international diagnostic application (Android, IOS) for assistance of neurosurgeons and neurologists **(May 2017- December 2017)**.

- Senior frontend developer, R&D developer of frontend's new structure and Scrum master, **AsanBe-san**, an online supermarket store application (Android, IOS and Management panel), site (https://www.asanbes **(November 2016 - May 2017)**.

- Frontend developer, **TocaApp**, application for selling drinks to marketers and stores (Android, IOS and Management panel) **(April 2016- November 2016)**.

- Frontend developer (Android, IOS, Management panel), **TKApp**, an international selling auto parts application **(October 2015- April 2016)**.

Skills:

- **Technical Skills:**
  - **Operating Systems:** Windows, Mac OS, Ubuntu (advanced proficiency in configuring and optimizing environments for research and development)
  - **Database Management Systems:** SQL Server, MySQL (experience in handling large datasets and integrating databases for data analysis projects)
  - **Programming Languages:**
    * **Python:** Proficient in Python for machine learning, data science, and automation tasks, especially with libraries such as **Pandas**, **NumPy**, **TensorFlow**, **PyTorch**, **Hugging Face transformers**, and **scikit-learn**.
    * **C++, Java, C#:** Extensive experience in software development, object-oriented programming, and performance optimization.
    * **Matlab, Prolog, Lua:** Strong background in algorithm design, simulation, and modeling, particularly for signal processing and logical problem-solving.
    * **Solidity:** Knowledgeable in blockchain development, useful for secure, decentralized applications in research projects.
  - **Web Technologies:** ASP.Net, PHP, Backbone, JavaScript, jQuery, Framework7, Handlebar, Underscore, Sass, CSS, HTML (creating responsive, user-centric web applications, especially for data visualization and user interaction).
  - **Task Runners & Package Managers:** Gulp, Grunt, Npm, Bower, Homebrew (optimizing development workflows and dependencies).
  - **Mobile Development Frameworks:** Cordova, Corona (developing mobile solutions for projects, useful for IoT-related tourism or sensor data apps).
  - **Others**: Soar (cognitive architecture for implementing of Memory), JADE (Java Agent Development Framework), Fuzzy clips, Arena Simulation software, Scrum, Git, Bash, Rational rose, LaTex, Zimbu

- **Machine Learning & AI Expertise:**
  - **Machine Learning Algorithms:** Proficiency in developing and deploying machine learning models using **TensorFlow** and **PyTorch**, particularly for applications in data classification, pattern recognition, and environmental impact analysis.
  - **Deep Learning:** Experience with neural networks, transfer learning, and reinforcement learning techniques, useful for implementing adaptive models in tourism sustainability.
  - **Natural Language Processing (NLP):** Familiarity with text analysis, translation, and sentiment analysis (with experience in Hugging Face's **transformers** for NLP tasks).
  - **Data Science & Analysis:** Advanced skills in data preprocessing, visualization (using **Matplotlib**, **Seaborn**), and statistical modeling for sustainable tourism research.
  - **Computer Vision:** Expertise in using **CLIP** and other vision models for multimodal data analysis (image and text correlation).

- **Project & Research Management:**
  - **Research & Development:** Experience in managing cross-disciplinary research projects, with a focus on sustainability, tourism, and AI-driven innovations.
  - **Project Management Tools:** Proficient in tools such as **Jira**, **Trello**, and **Asana** for task tracking and team coordination.
  - **Collaboration:** Strong ability to work in teams with diverse academic and technical backgrounds, including project leads, researchers, and external stakeholders.
- **Other Skills:**
  - **Software Development & Engineering:** Experience in developing modular, scalable solutions using best software engineering practices, ensuring high-quality, maintainable code.
  - **English Proficiency:** B2 level in English (advanced technical reading and writing skills).
  - **Multimodal Data Analysis:** Expertise in developing models that analyze and compare data from various sources, including text, images, and environmental data.

Languages:

- **Persian:** Native (Fluent in speaking, reading, and writing)
- **Kurdish:** Native (Fluent in speaking, reading, and writing)
- **English:** C1 (Advanced proficiency, fluent in reading, writing, and speaking technical and non-technical content)
- **Italian:** A2 (Basic proficiency, able to communicate in everyday situations)
- **Arabic:** B1 (Intermediate proficiency, able to understand and communicate in common contexts)

References:

Prof. Aris Anagnostopoulos	Sapienza University of Rome Department of Computer, Control & Informatics Engineering Engineering in Computer Science via Ariosto 25, Rome 00185, Italy aris@diag.uniroma1.it	
Prof. Ioannis Chatzigiannakis	Sapienza University of Rome Department of Computer, Control & Informatics Engineering Engineering in Computer Science via Ariosto 25, Rome 00185, Italy ichatz@diag.uniroma1.it	+39 0677274073
Prof. Tuncer Oren	University of Ottawa Emeritus Professor of Computer Science School of Electrical Engineering & Computer Science Faculty of Engineering 800 King Edward Ave. P.O. Box 450, Stn A Ottawa, Ontario, Canada, K1N 6N5 oren@eecs.uOttawa.ca	(613) 271-1214
Dr. Mohammad Kazemifard	Razi University Department of Computer Engineering School of Engineering Razi University Baghe Abrisham P. O. Box. 67149-67346, Kermanshah, Iran & CEO&Founder of, Shenakht Company A cognitive accelerator, Kermanshah, Iran m.kazemifard@gmail.com	+989183306035
Dr. Jahangir Karami	Razi University Department of Psychology Faculty of Social Science Beheshti Avenue Kermanshah, Iran J.karami@razi.ac.ir	+989181324389