Alireza Esmailzadeh Mojdehi

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EDUCATION

 B.Sc. in Computer Engineering Islamic Azad University . Rasht , Guilan - Iran Expected Graduation: June 2026

Relevant Coursework: Machine Learning, Data Structures, Algorithms, Software Engineering

RESEARCH EXPERIENCE

Research Volunteer | Multiple Research Initiatives, Islamic Azad University April , 2022 - Present

- Active Participation: Contributed as a volunteer member in six short-term research initiatives across diverse fields including Artificial Intelligence, Human-Computer Interaction, Operating Systems, and Database Design.
- Skill Development: Gained hands-on experience in technical literature review, data collection, collaborative problem-solving, and academic writing for both reports and journal submissions.
- Presentation & Communication: Delivered bilingual presentations (English and Persian) on complex technical topics to academic audiences, demonstrating ability to communicate research findings effectively.
- Key Achievement: Applied this accumulated research expertise to coauthor a comprehensive review paper on AI in Telemedicine, currently in its final drafting phase for submission to a peer-reviewed journal. This demonstrates my ability to commit to a long-term project and see it through to completion.

Selected Research Highlights:

• First-author, Review Paper: "The Necessity of Artificial Intelligence for Telemedicine"

- Islamic Azad University | Apr 2025 Present
- ed the literature review process, defining the scope and synthesizing findings from over 100 research papers
- Took primary responsibility for drafting the entire initial manuscript and coordinating revisions based on feedback.
- Focused on exploring the role of Al in remote healthcare, particularly for underserved regions.
- The manuscript is in its final drafting phase for submission to a peer-reviewed journal.

Al in Industry Conference Project (Apple Face ID Technology)

- 2022
- Researched technical aspects of Al applications in industry; focused on Face ID's machine learning architecture.
- **Role:** Delivered the final group presentation in English at the university conference.

Database Lab: Pharmacy Management System

- 2023 *Duration: 3 months*
- Collaborated in a 6-member team to design and present a functional SQL-based database system.
- **Role:** Managed data collection and sample dataset organization; supported query design.

· Linux Kernel Research Group

- 2023 | *Duration: 3 months*
- Researched architecture and functionality of Linux shell and kernel components.
- **Role:** Delivered technical presentation in English on system calls and process management.

PROJECTS

Java-based Movie Recommendation System | Java

Developed a collaborative filtering recommendation engine to predict user preferences for films.

Keywords: Machine Learning, Data Processing, Algorithm Implementation

• Python-based Paris Air Quality Analysis | Python, Pandas, Matplotlib

Analyzed and visualized a real-world air quality dataset to identify pollution trends and correlations.

Keywords: Data Analysis, Data Visualization, Statistical Analysis

• **E-Collector Unreal Game** | Unreal Engine, C++ Designed and developed core game mechanics for a third-person collector game, focusing on character movement and interaction systems. Keywords: Game Development, Software Architecture, System Design

TECHNICAL SKILLS

- Programming Languages:
 Python (Proficient), Java (Proficient), HTML/CSS (Familiar)
- Frameworks & Tools:
 Git, Scikit-learn, Pandas, NumPy, Godot, Unreal Engine
- Languages:
 Persian (Native), English (Fluent), Turkish (Fluent), French (Intermediate)

TEACHING EXPERIENCE

Private Tutor | 2023 - Present

- Tutored Java programming to undergraduate students, focusing on OOP concepts and data structures.
- Tutored English and Turkish languages to elementary-level students.