Seyedeh Zahra (Mahya) Hamedi









Education

MSc. Medical Informatics - GPA: 3.61/4

01 Oct 2020 - 20 Dec 2023

Shahid Beheshti University of Medical Sciences - Fully Scholarship

Thesis: Application of Machine Learning in Breast Cancer Survival Prediction: a Multimethod and Multicenter Comparison

• Web and Windows programming: 18.25/20

• Neural networks and intelligent medical systems: 19.5/20

• Thesis: 19/20

• Management in Medical Informatics: 18.5/20

BSc. Health Information Technology - GPA: 3.55/4

15 Sep 2016 - 22 Aug 2020

Shiraz University of Medical Sciences - Fully Scholarship

Thesis: investigating the level of compliance with the requirements in selected virtual assistants in the field of mental health

• General Mathematics: 20/20

• Research Project: 19/20

• Computer network and systems security: 18.9/20

• Health Informatics: 18.5/20

• Research Project: 19/20

Health Information Management: 18/20

Research Interests

• Innovation: AI, Machine learning, Precision Medicine, Neuroscience, LLMs, eHealth, IoT, Gamification

• Design and Evaluation: Digital Health Product Design, Strategic Management

Skills

- Programming: Python (Web scraping Sklearn TensorFlow Scikit-learn Tesseract Streamlit), HTML, CSS
- Research Skills: Survey Design, Data Analysis, Machine Learning, SPSS, Data Gathering, SPSS, Interviewing
- Product Design: Benchmark, Need Assessment, User Research, Figma, Adobe photoshop
- Other Technical Skills: MySQL, Software Testing, Postman, AI Agent Development, Fine Tunning, RAG
- Soft Skill: Team Working, Speech and Presentation, Project Management, Problem Solving, Stress Management
- Language Skills: Persian (Native), English (IELTS 7)

Research & Publications

• Seyedeh Zahra Hamedi, et al "Design and Evaluation of Gamification Approaches in a Personalized Health Mobile Application for Lifestyle Optimization"

2025, Not published yet

• Sohrab Almasai, Reza Rabiei "Seyedeh Zahra Hamedi, et al "Healthcare Dashboards: An Umbrella Review of Applications, Benefits, Design and Challenges"

Digital Health Journal, Under Review, 2025

• Seyedeh Zahra Hamedi, Hassan Emami, Maryam Khayamzadeh, Mehrad Aria, Reza Rabiei, et al "Application of Machine Learning in Breast Cancer Survival Prediction Using a Multimethod Approach"

Published by Nature in Scientific Reports Journal, 2024 - DOI

• Seyedeh Zahra Hamedi, Hassan Emami, Maryam Khayamzadeh, Mehrad Aria, Reza Rabiei, et al. "Providing an Efficient Model Based on Deep Learning to Predict 5-year Survival in Women with Breast Cancer"

Accepted at the 17th International Conference on Health Informatics, 2024

 Mehrdad Karajizadeh, Reza Nikandish, Omid Yousefianzadeh, Zahra Hamedi, and Hamid Reza Saeidnia. "Usability Evaluation of the Electronic Medical Record of the Rapid Response Team: a Case Study."

Published by Applied Health Information Technology Journal, 2021 - DOI

Digital Product Manager LifeandMe | Tehran - Iran

01 Sep 2022 - Present

A DTC genetic testing company

- Doing user research and managing the design and development of an Android application for our customers, providing health reports based on genetic and epigenetic data analysis.
- Exploring Interoperability Standards and nomenclatures to design genetic and epigenetic databases and the data analysis process automation.
- Using fine-tuning and retrieval-augmented generation (RAG) in large language models (LLMs) to provide more comprehensive recommendations and develop a chatbot for our users.
- Led the design and development of a web-based panel to manage internal workflows, such as logistics, financial operations, and CRM.
- Developed a WhatsApp automation tool and Telegram bot using Python, which was utilized as a marketing and CRM tool.

Research Assistant Multi-Center | Shiraz & Tehran - Iran

04 Jan 2022 - 20 Dec 2023

- Interviewed Patients and care providers for data gathering, cleaning data and entering them into EHR.
- Machine Learning and Deep Learning Modeling

Digital Product Manager YouMate | Tehran - Iran

01 Apr 2021 - 31 Oct 2022

- Managed the design and development of a web-based panel to analyze medical lab tests using OCR.
- Developed the OCR functionality using Python (PaddleOCR, Tesseract).
- Participated in creating a medical lab dictionary to train the OCR
- Participated in Producing Multimedia educational content for medical lab factors introduction and lifestyle modification.

Product Designer YouMate | Tehran - Iran

01 Sep 2020 - 31 Mar 2021

- Designed a mobile application MVP in the field of health.
- Participated in The Design and development of a personalized PDF named CoWin that provides personalized instructions in the fields of nutrition, exercise, mindful eating, and mental health to prevent coronavirus.

Other Activities

Volunteer Work - Managing the development of a self-care application for cystic fibrosis patients and a specialized EHR system for CF healthcare centers in Iran, under the supervision of the Iran CF Foundation.

Collaboration with The Academy of Medical Sciences - Participated with the Digital Health

July 2024

Committee in creating an infographic document on elevating digital health literacy

Psychology based HR Platform - Managing the design and development of a human resource **Aug 2022 - Feb2023** management platform based on psychological tests that were used by a psychiatric resident in his thesis.

Personalized Medicine National Document - Member of a multidisciplinary group of writers

Nov 2021-May 2022

The goal of this document was to provide guidance for enhancing PM in Iran by drawing inspiration from successful cases around the world.

Selected Honors & Awards

2023- YouMate was selected as one of the top teams in Iran's Intelligent Leap in Digital Economy Plan.

This was because of a web-based panel I managed, designed to analyze medical lab tests using OCR.

2020- 3rd Out of all applicants in the Nationwide Universities Entrance Exam for Master of Medical Informatics

2020-5th Out of all applicants in the Nationwide Universities Entrance Exam for Master of Health IT

2016- Top 2%, Out of 500,000 applicants in the Nationwide Universities Entrance Exam

Selected Courses

2025- Introduction to Retrieval Augmented Generation (RAG) - Coursera Instructor Network

2024- User Research of Digital Products - Userx Academy

2024- Machine Learning Foundations for Product Managers - Duke University Certificate

2023- Digital Product Management: Modern Fundamentals - University of Virginia Certificate

2023- Data Science in Stratified Healthcare and Precision Medicine - The University of Edinburgh Certificate

2020- Advanced programming using Python - Maktabkhone Certificate

2020- Introduction to programming using Python - Maktabkhone Certificate

2019- Bioinformatics Summer School - Shiraz University of Medical Sciences Certificate