

Zahra Amooyi Asrami

Zahra.Amooyi1994@gmail.com | +989378950221 | linkedin.com/in/zahraamooyi

B.Sc. in Computer Engineering with over nine years of experience in software development, programming instruction, and user-centered design. Founder of the Farayaneh Educational Institute, where I have trained over 1,500 students, achieving a 70%+ employment rate in technology fields. I also developed a physiotherapy rehabilitation platform for older adults, emphasizing personalized guidance, adherence support, and accessibility, which sparked my strong interest in digital health and interactive systems. My research interests focus on Human - Computer Interaction (HCI), digital health, and interactive visualization - particularly designing inclusive, emotionally supportive systems and transparent, user-explorable interfaces that enhance well-being and accessibility for diverse populations. I am seeking a Ph.D. or Master's program in Computer Science (Fall 2026) to advance research in persuasive and interactive health technologies, visual analytics, and interaction techniques for complex information and healthcare systems.

EDUCATION

- **B.Sc. in Computer Engineering (Software)** - Mazandaran University of Science and Technology, Behshahr, Iran (2012 – 2016)
 - Thesis: Web-based University Association Platform emphasizing usability, accessibility, and intuitive interfaces for remote collaboration and visual data exploration (Grade: “Excellent”).
 - GPA: 14.61/20 ($\approx 3.1/4.0$) ; graduated in the top 5% of class.
 - Honors: Ranked in the top 2% among approximately 300,000 participants in Iran's National University Entrance Exam (2012). Awarded a full-tuition merit scholarship for undergraduate studies (2012–2016).

RESEARCH INTERESTS

- Human–Computer Interaction (HCI) in Digital Health
- Data Science
- Natural Language Processing
- Generative AI
- Digital Health Tools and Supportive Systems for Older Adults
- Persuasive Technology for Health Behavior and Adherence

RESEARCH EXPERIENCE

- **Current Research Project | In Progress**
“A Conversational Digital Assistant for Supporting the Mental Health of Older Adults”
 - Investigating design considerations for conversational AI interfaces tailored to older adults' emotional needs, incorporating visualization literacy and interactive analytics for transparent, user-explorable patterns that build trust and therapeutic value.
 - Exploring human-AI interaction patterns that promote usability and engagement for aging populations.
 - Addressing accessibility challenges in voice/text-based interfaces with inclusive visual design.

HONOR AND AWARDS

- 1st Place, Programming Marathon Olympiad (2022) : Won top prize for developing a user-centered real estate platform with intuitive UI, robust accessibility, and optimized input techniques.
- National Exam Distinction: Achieved Top 2% rank among 300,000 participants in Iran's national university entrance exam (2012)
- Full Undergraduate Merit Scholarship: Received a full-tuition scholarship at Mazandaran U. of Science and Technology for academic excellence (2012–2016)

TEACHING & ACADEMIC EXPERIENCE

- **Founder & Chief Lecturer, Farayaneh Educational Institute** – Sari, Iran (2018 – Present)
 - Trained 1,500+ students; authored programming textbooks; 70%+ employment rate in tech.
- **Volunteer Digital Literacy Instructor, Iranian Relief Committee** – Mazandaran, Iran (2018 – Present)
 - Taught 200+ underprivileged youth and older adults.
- **Contract Programming Instructor, University of Science and Technology of Mazandaran** – Behshahr, Iran (2016 – 2017)
 - Taught C# and web development to 100+ undergraduates; aligned curriculum with industry needs via Entrepreneurship Center collaboration and mentored capstone project teams.

PROFESSIONAL EXPERIENCE

- **CEO & Lead Software Developer** | PayamAfzar Avang Tabarestan Co. – Sari, Iran (2017 – Present)
 - Led 10-developer team delivering 150+ user-centered web and enterprise systems with 100% client satisfaction.
- **Software Developer** | Rayan Electronic Sepehr Jahangir Co. – Sari, Iran (2016 – 2017)
 - Designed and deployed province-wide C# electricity monitoring service using real-time data collection and visualization dashboards, which reduces manual errors and enhances operational efficiency.
- **Software Developer** | Jadooye Fekr Programming Co. – Sari, Iran (2015 – 2016)
 - Upgraded a national utility company's CRM, improving responsiveness and user functionality for remote teams.
- **IT Intern** | Neka Cement Factory (Informatics Dept.) – Neka, Iran (Summer 2015)
 - Redesigned corporate website for low-literacy users using visual aids and simplified navigation.

SELECTED PROJECTS (HCI & SOFTWARE DEVELOPMENT)

- **PhysioCare Rehabilitation Software** (2025)
 - Accessible health app for older adults combining video-guided exercises, passive monitoring, and calm family connections.
- **Online Billing & Invoices Management Software** (2025)
 - Designed user-centered invoicing platform with intuitive visual workflows, automated reporting dashboards, and accessible navigation that significantly improved operational efficiency and sales.
- **Applied Research & Development Center E-Commerce Platform** – [Takato.ir](https://takato.ir) (2023)
 - Built accessible multi-module platform for 60,000+ rural products featuring personalized visual recommendations, responsive dashboards, and inclusive interaction patterns that replaced paper processes and boosted user engagement..
- **Educational Management Portals** – [Farravaneh.ir](https://farravaneh.ir) & [Mehrangiz.org](https://mehrangiz.org) (2021)
 - Student-centered management and marketing platforms for 50+ institutes with inclusive UI and accessibility features.
- **Multi-Level Travel Booking Platform** – [TetisSari.ir](https://tetisari.ir) (2020)
 - High-concurrency flight booking platform with accessible search and payment flows; increased user registration 60%.
- **FaraPazhoh Virtual Library Platform** (2020)
 - Real-time collaborative reading architecture adopted by 50+ Iranian universities.

CERTIFICATIONS

- **Node.js, React & JavaScript** – Code the Dream, USA (2025)
- **AI-Assisted Academic Paper Writing** – Sari Azad University, Iran (2025)
- **Advanced Web Development (MVC, C#, SQL Server)/Entrepreneurship & Management of Technical Institutions** – Technical & Vocational Training Organization of Iran (ILO), 2018-2021
- **ASP.NET Webform & Software Systems Design** – Mazandaran University of Science and Technology, 2017-2018

TECHNICAL SKILLS

- **HCI & UX:** Figma, React.js, User Research, WCAG 2.1
- **Languages:** C#, JavaScript, Python, SQL, C++
- **Frameworks:** ASP.NET Core/MVC, Node.js, Web API, SignalR
- **Frontend:** React.js, Kendo UI, AJAX, PWA, HTML/CSS
- **Databases & Tools:** SQL Server, MongoDB, Git, Postman, VS Code, Dapper ORM

MEMBERSHIP

- **Active Member & Workshop Organizer, University Computer Association** - Mazandaran U. of Science & Tech. (2012 – 2016)
 - Organized coding workshops for 200+ participants.

VOLUNTARY ACTIVITIES

- **Volunteer Tech Educator**, Iranian Relief Committee – Mazandaran, Iran (2017 – 2025)
 - Taught basic computer skills and introductory programming to over 200 individuals in underserved communities, including low-income youth and adults, as part of a digital literacy initiative focused on accessible technologies to boost employability and inclusion.

REFERENCES

Hamed Rajabi – Assistant Professor, ECE Dept., **Mazandaran University of Science and Technology** (email: rajabi@aut.ac.ir).

Naiem Yousefifard – Lecturer, ECE Dept., **Mazandaran University of Science and Technology** (email: iritman@gmail.com).