

Education

University of Genova, Genova, Italy

Master of Science in Digital Humanities (Human-Computer Interaction Focus)

GPA (Currently) : 4.0

Expected Graduation: Dec 2025

Thesis (Ongoing): *A Segmentation Framework based on Cognitive Science for Empowering Hybrid Co-Working in Industry 5.0*

- Developing a computational framework leveraging Artificial Intelligence (AI) and Computer Vision (CV) to segment meaningful temporal units in hybrid assembly processes (Industry 5.0).
- Applying principles from Cognitive Science, specifically Event Segmentation Theory (EST), to inform the segmentation model and enhance human-machine cognitive common ground.
- Investigating the use of machine learning models (e.g., Vision Transformers) to predict event boundaries from time-series observational data of operator behavior.

Relevant Coursework & Projects:

- **Cultural Welfare Technologies - Arts and Culture (Project: "reSilence"):**

Co-developed an artistic installation using MediaPipe for body movement recognition and facial analysis for emotion detection to guide a self-learning experience.

- **Affective Computing:**

Analyzed how novel music evokes emotional responses, motivating genre exploration and potentially improving wellbeing.

- **Cultural Welfare Technologies - Performing Arts (Project: "Unity at Sea"):**

Contributed to an interactive installation tracking group balance via Kinect, mapping data to a soundscape using EyesWeb to foster group awareness.

- **Data Semantics Research (Annotation):**

Developed an ontology for an Art Form (HipHop) using Protege.

- **XR (Extended Reality) Project:**

Built a TPS game using Unreal Engine.

- **HCI Research (Project: "Perfect Posture" / SitWell):**

Developed "Perfect Posture," a system to mitigate gamers' health risks, through an iterative process including persona development, CV-based posture tracking prototype, usability testing (SUS 73.33), and heuristic evaluation.

Azad University of Isfahan, Isfahan, Iran
Bachelor of Science in Computer Engineering
Graduation: July 2023

- **Thesis:** *Developed an E-commerce Web Application based on Ethereum Blockchain.*
- **Major Projects:**
 - Designed an Object-Oriented POS System solution for small businesses.
 - Implemented Iris Flower Classification using Machine Learning.

Research & Technical Experience

Student Volunteer, 17th International Conference on Advanced Visual Interfaces (AVI 2024)
June 2024 | University of Genova, Italy

- Assisted in conference organization, including attendee registration, session management, and speaker support.
- Gained exposure to current research in advanced visual interfaces (ACM SIGCHI, SIGWEB, SIGMM).

Web Developer, APA IUTcert
March 2022 – June 2022 | Isfahan, Iran

- Developed and maintained official websites using React JS, ensuring project alignment.
- Improved website functionality and user experience by identifying issues and implementing Redux.

Web Developer, IUT International Scientific Cooperation Center
January 2021 – April 2021 | Isfahan, Iran

- Collaborated with cross-functional teams to design and develop web pages for Switzerland Universities utilizing Figma.
- Adapted to new web development frameworks and tools; led aspects of the design process.

Skills

- **Programming Languages:** Python, JavaScript, TypeScript, C++
- **Computer Vision & AI/ML:**
 - **Libraries/Frameworks:** PyTorch, MediaPipe, OpenCV, Scikit-learn
 - **Concepts:** Event Segmentation Theory (EST), Emotion Recognition, Behavior Segmentation, Time Series Analysis, Object Tracking, Facial Expression Analysis, Machine Learning, Deep Learning
- **Research Methods:** Literature Review, Data Collection, Dataset Creation, Development of Baseline Classifiers, Experimental Design.
- **Soft Skills:** Teamwork & Collaboration, Effective Communication, Problem-Solving & Critical Thinking, Leadership & Project Management, Adaptability & Learning Agility
- **Languages:**
 - English: C1 Level (IELTS 7.5)
 - Persian: Mother Tongue
 - Italian: A2 Level