

Biography

Mahya Baghaei was born on March 6, 2001, in Zanjan. She received her bachelor's degree in medical engineering (bioelectric orientation) from Shahid Beheshti University. Currently, she is a master's student in medical engineering (bioelectric) at Amirkabir University of Technology. Her research interests focus on the application of chaos theory and complex networks, specifically Central Pattern Generators (CPGs). In addition to her academic work, she has completed various workshops on medical equipment, gained practical experience through hospital internships, and conducted her undergraduate research project on the effect of auditory and visual cues on gait initiation in Parkinson's patients.

Education

- **Master of Biomedical Engineering (Bioelectric)**

Amirkabir University of Technology

Tehran-Iran

Oct 2025 – Present

- **Bachelor of Biomedical Engineering (Bioelectric)**

Shahid Beheshti University

Tehran-Iran

Oct 2021 – Sep 2025

GPA: 18.55 / 20

- **High School Diploma in Experimental Sciences**

Farzanegan 1 High School,

Zanjan-Iran

Sep 2016 – Jun 2019

Projects

Analyzing the Effect of Visual and Auditory Cues on Gait Initiation in Parkinson's Patients

Investigated the impact of rhythmic visual and auditory stimuli on the gait initiation process in patients with Parkinson's disease.

2024 - 2025

Honors

Distinguished undergraduate student – Admission via Brilliant Talents program

Personal interests

- **Chaos theory in biological systems**
- **Complex networks (CPGs)**
- **Biological signal processing**
- **Machine learning**
- **Deep learning**

skill

MATLAB

Python

C++

PSpice

Proteus

Microsoft Office

Adobe Photoshop

<http://linkedin.com/in/mahya-baghaei>