# Sajad Sarlaki

Calgary, AB, Canada
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## Research Interests

Assistive technologies; human–computer interaction (HCI); accessibility and autism support technologies; adaptive learning systems; software systems and performance; applied machine learning for education and health.

## Education

**University of Calgary**, Calgary, Canada
**M.Sc. in Electrical and Software Engineering** (Thesis-based)
*January 2025 – Present*
- Research group: ETHEREAL Research Group
- Focus: Designing and evaluating assistive typing and communication systems for nonspeaking autistic individuals using adaptive interfaces, computer vision, and AI-driven feedback

**Amirkabir University of Technology (Tehran Polytechnic)**, Tehran, Iran
**Bachelor of Science (B.Sc.) in Computer Engineering**
*September 2017 – March 2022*
- GPA: 17/20

## Publications

**Sarlaki, S.**, et al. *Co-Designing Assistive Technologies with Nonspeaking Autistic Collaborators.* ACM Designing Interactive Systems (DIS). Under review.

## Conference Presentations

Gektin, S., **Sarlaki, S.**, Blasko, G., et al. (2026, April 22–25). *Insights from the inside: Ethical co-design of technology for and with nonspeaking autistic people.* Poster presented at the International Society for Autism Research (INSAR) Annual Meeting, Prague, Czech Republic. Accepted.

Gektin, S., **Sarlaki, S.**, Blasko, G., et al. (2026, March 27). *When speech isn't the default: Co-designing communication access and shared authority in higher education.* Panel presentation at the CUNY Neurodiversity Conference, City University of New York, New York, NY, USA. Accepted.

## Research & Professional Experience

**BAYAN**, Tehran, Iran
**Front-End Developer**
*May 2022 – 2024*
- Modernized legacy front-end codebases
- Developed mailbox and administrative interfaces
- Worked with SMTP, POP3, IMAP protocols
- Technologies: React, Redux, Django, Redis

**UTOPIA**, Tehran, Iran
**Co-Founder & Developer**
*August 2018 – April 2022*
- Co-designed and implemented an agricultural technology platform
- Developed web and mobile applications
- Mentored undergraduate interns in modern front-end practices

## Teaching Experience

**University of Calgary**, Calgary, Canada
**Graduate Teaching Assistant**
*January 2025 – Present*
- ENEL 353 – Circuit Design
- ENCM 369 – Computer Organizations
- ENSF 619 – Full-Stack Development
- SENG 533 – Software Performance Evaluation
- SENG 438 – Software Quality, Reliability, and Testing
- Led tutorials and laboratory sessions; assisted students with technical problem-solving; graded assignments, labs, projects, and presentations

**Amirkabir University of Technology**, Tehran, Iran
**Teaching Assistant**
*2019 – 2021*
- Advanced Programming
- Signals and Systems
- Computational Intelligence
- Designed and graded assignments and quizzes; provided academic and technical support

## Projects (Selected)

**Adaptive Typing and Communication Support System (Ongoing)**
Research-driven assistive typing platform integrating a tablet UI, custom RGB keyboard cues, audio feedback, and computer vision-based interaction. Project overview

**Aragorn-js**
JavaScript library for creative and educational 2D content using WebGL (B.Sc. final project).

GitHub repository

## Project Collections

projects spanning computational intelligence, data mining, networks, databases, and machine learning. GitHub projects: [1] [2] [3] [4] [5]

## Skills

**Programming & Software Development:** JavaScript, Python, Java, Node.js, Express
**Web & Mobile Development:** React, React Native, HTML5, CSS3, SCSS/Sass, Redux
**Systems & Tools:** Git, Webpack, REST APIs, Redis, Django
**Design & Prototyping:** Figma
**Methodologies:** Agile/Scrum, responsive design, software testing fundamentals

## Service, Leadership & Community Engagement

### Community-Based & Participatory Engagement
- Volunteer participant in the University of Calgary Beast Mode program, supporting inclusive wellness, regulation, and peer engagement
- Organized and facilitated accessible co-design meetings and informal community social sessions

### Academic, Technical & Entrepreneurial Leadership
- Co-founder of an early-stage technology startup (UTOPIA)
- Organized technical workshops and knowledge-sharing sessions
- Mentored undergraduate interns in industry and academic settings
- Academic and technical service through graduate teaching assistant roles and open-source contributions

## Languages

- English (Professional)
- Persian (Native)