

# DANIAL ASGARI

Tehran, Iran • [danialasgari1383@gmail.com](mailto:danialasgari1383@gmail.com) • [danialasgari.com](http://danialasgari.com)  
[github.com/daniasg](https://github.com/daniasg) • [linkedin.com/in/danial-asgari](https://linkedin.com/in/danial-asgari)

## SUMMARY

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Computer Engineering student with 3.5 years of professional IT experience and independent research in self-regulating AI systems. Combines hands-on software engineering (Python, ML services, Docker) with a research focus on reliability, fault detection, and autonomous recovery in intelligent infrastructure.

## EDUCATION

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### Islamic Azad University — Central Tehran Branch

2022 – Present

B.Sc. in Computer Engineering (Information Technology) · GPA: 16.20 / 20

### High School Diploma — Mathematics & Physics, Tehran

2019 – 2022

GPA: 19.49 / 20

## RESEARCH

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### Self-Regulating Cognitive Architecture (SRCA): A Theoretical Framework for Artificial Awareness

2026

*Independent research preprint (single author) · [philpapers.org/rec/ASGSCA](https://philpapers.org/rec/ASGSCA)*

Proposed a four-domain architecture integrating Integrated Information Theory, Global Workspace Theory, and predictive processing into a unified, testable framework for self-regulating systems.

**Research interests:** self-healing systems using reinforcement learning; fault prediction in distributed systems; AI-driven reliability and failure detection in complex infrastructure; scalable architectures for intelligent monitoring in cloud and edge computing.

## TECHNICAL PROJECTS

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### Self-Regulating ML Inference Service

*Python · FastAPI · scikit-learn · Docker · [github.com/daniasg/self-regulating-ml-service](https://github.com/daniasg/self-regulating-ml-service)*

Built a containerized ML service that monitors its own performance, evaluates prediction confidence, and regulates its responses — returning a safe “uncertain” output and flagging itself for retraining when confidence drops below threshold. An applied realization of the principles in my SRCA research.

### Transcript Cleaner

*Python · Whisper · Ollama · [github.com/daniasg/transcript-cleaner](https://github.com/daniasg/transcript-cleaner)*

Developed an AI-powered local transcript cleaner combining OpenAI Whisper for speech-to-text with a locally-run Ollama language model to clean and refine transcripts — entirely offline, with no external API dependency.

## PROFESSIONAL EXPERIENCE

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### IT Specialist — Tizbam Educational Company, Tehran

2022 – Present

- Maintain IT infrastructure for e-learning platforms, resolving 10–15 software and hardware issues weekly.
- Automated data workflows and log analysis with Python scripting, improving data-processing speed.
- Collaborate with educators and developers to support and optimize platform reliability.
- Volunteer as an exam-day organizer for preparatory exam events — coordinating logistics and guiding students as part of the organizing team.

## TECHNICAL SKILLS

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**Languages:** Python (Advanced), C++ & Java (Foundational)

**ML & Data:** scikit-learn, Pandas, model serving, confidence-based evaluation

**Tools & Infrastructure:** Docker, Git, FastAPI, REST APIs, Linux / WSL

**Practices:** containerization, self-monitoring system design, data automation

## LANGUAGES & ADDITIONAL

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**Languages:** Persian (native), English

**Honors & Activities:** Accepted in the first round of the Iranian Physics Olympiad (10th grade); regional and provincial medalist in Chess, Swimming, and Basketball.