# MAHDI M. JADIDI

Computer Engineering Student, University of Tehran

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B.Sc. Computer Engineering student at the University of Tehran (ranked 73/60,000 in the 2023 Iranian National Entrance Exam) with strong foundations in algorithms, data structures, and computer systems. Interested in research at the intersection of algorithms and ML-for-systems, with experience designing an LLM-assisted controlled learning experiment and performing statistical analysis in R.

## EDUCATION & TRAININGS

2023 – Expected graduation: 2027

### B.Sc. Computer Engineering

**University of Tehran**

- Rank 73 out of 60,000 in the 2023 Iranian National Entrance Exam
- Active in academic competitions and university associations
- Major GPA: 3.5/4.0; top 10% of cohort

2018 – 2023

### Diploma in Mathematics & Physics

**National Organization for Development of Exceptional Talents (NODET)**

- Math & Computer Olympiad participant (accepted 2022 in Computer Olympiad)
- GPA: 3.9/4.0 (Rank 3)

## EXPERIENCE

2024 – Present

### LLM-assisted Statistics Learning Experiment

Probability & Statistics course project

**University of Tehran**

- Designed a controlled educational experiment with 100 students solving Poisson-distribution exercises under two conditions (control vs. AI-assisted).
- Evaluated learning via a final exam (no AI tools allowed); approximately 60% of the AI-assisted group outperformed the control group.
- Implemented data collection, statistical analysis, and visualization in R; summarized results for reporting.

Skills used: PYTHON | R | DATA ANALYSIS | EXPERIMENTAL DESIGN

2023 – Present

### Student Projects

**University of Tehran**

- Implemented core data structures and algorithms (graphs, dynamic programming, greedy methods) in C and C++ as part of university programming courses (BP, AP).
- Participated in ACM and IEEE student chapter activities and mentored junior students on basic algorithmic thinking and coding concepts.
- Completed multiple course projects under tight deadlines while maintaining strong academic performance.

Skills used: C | C++ | PYTHON | VERILOG | HTML | CSS | JAVASCRIPT

2021 – 2022

### Full-Stack Development

Full-Stack Developer

**idArasham, Iran**

- Developed and maintained web applications using HTML/CSS/JavaScript with backend components in C++/Python.
- Collaborated with hardware and network teams to integrate web applications with internal infrastructure and resolve deployment/connectivity issues.
- Proposed and implemented small improvements to increase maintainability.

Skills used: C++ | PYTHON | HTML | CSS | JAVASCRIPT

## COURSEWORK

**Done:**
Basic Programming (C), Advanced Programming (C++), Discrete Mathematics

**Ongoing:**
Probability & Statistics (R), Data Structures & Algorithms (Python), Logic Circuit / Digital Systems (Verilog)

## LANGUAGES

| | |
|---|---|
| **Persian** | Native |
| **English** | C1 |
| **German** | A2 |

## SKILLS, TOOLS & PLATFORMS

### Programming languages

- C
- C++
- Python
- R
- JavaScript
- HTML
- CSS
- Verilog

### Tools & Platforms

- Git
- Linux
- Docker
- VS Code
- ModelSim
- LLMs & Prompt Engineering
- n8n

### Algorithms & Data

- Graph algorithms; dynamic programming; greedy methods
- Algorithm design and complexity analysis
- Statistical analysis and visualization in R
- Experimental design (A/B-style evaluation)

### CS Fundamentals

- Computer architecture and system operations
- Operating systems basics
- Database concepts and SQL
- Object-oriented programming (OOP)

## RESEARCH INTERESTS

- Algorithms and complexity; graph algorithms and combinatorial optimization
- Learning-augmented algorithms and ML-for-systems (scheduling, caching, resource allocation)
- Operating systems, distributed systems, and efficient runtime systems
- Hardware–software co-design and digital systems (Verilog-based architectures, accelerators)