







# Delaram Rajaei

 +98 9199070925	 rajaied@aut.ac.ir	 rajaiedelaram@gmail.com
 linkedin.com/in/delaram-rajaei	 github.com/DelaramRajaei	 1661696718

## OBJECTIVE

Curious and dedicated computer engineering student (3.60 GPA) currently attending Amirkabir University of Technology (AUT), voracious desire to learn more about Artificial intelligence and Machine Learning.

## EDUCATION

### Amirkabir University of Technology (AUT)

Sep, 2018 – Present

B.Sc. of Computer Engineering, IT (8th Semester) | Tehran, Iran

Amirkabir University of Technology (AUT) is ranked #647 in Best Global Universities

GPA: 3.60/4.00

## SELECTED COURSES

- Principles of Computational Intelligence: 19.5
- Principles and Applications of Artificial Intelligence: 18.35
- Robotics: 18.1
- Applied Linear Algebra: 16.9

## AWARDS & HONORS

- Among top ranked undergraduates, Amirkabir University of Technology, Spring 2022
- Achieved top 2% place among all applicants of the Nationwide University Entrance Exam for B.Sc. in Mathematics and Engineering (Approximately 150000 applicants), Iran, 2018
- Advanced degree in English, Iran language Institute, 2016
- Top 3 Among all students in each Semester in High School, Alavi Highschool

## RESEARCH INTERESTS

- Computer Vision
- Natural Language Processing (NLP) In Artificial Intelligence
- Reinforcement Learning
- Machine Learning

# ACADEMIC PROJECTS & RESEARCH

---

**Sprinkle:** <https://github.com/DelaramRajaei/Sprinkle>

**Winter 2022**

- Language: Python
- Estimating the time duration for watering soil
- Used fuzzy logic

**SnailJumper-Master:** <https://github.com/DelaramRajaei/SnailJumper-master>

**Winter 2022**

- Language: Python
- Developed a game which can be played both manual and by neuroevolution algorithm. In this game there is an animal that should try to avoid obstacles and gain score.
- Used neuroevolution algorithm

**Inverted pendulum:** <https://github.com/DelaramRajaei/Inverted-pendulum>

**Winter 2022**

- Language: Python
- Created a pendulum fixing on top of the cart in reverse. The cart can move either left or right with different speed in order to keep the pendulum fixed on top.
- Used fuzzy logic

**Fruits Classification:** <https://github.com/DelaramRajaei/Fruits-Classification>

**Winter 2022**

- Language: Python
- Created a machine recognizing three different fruits.
- Used neural network

**Binary puzzle:** <https://github.com/delaramrajaei/binary-puzzle>

**Spring 2021**

- Language: Python
- Filling a Binary puzzle according to some specific rules. Given  $N \times N$  puzzle like sudoku but with binary numbers. There are some rules that should be applied before solving each puzzle. The machine can also recognize unsolvable puzzles.

**Bringing butter:** <https://github.com/DelaramRajaei/IDS>

**Spring 2021**

- Language: Java
- Developed a robot choosing the optimal way in order to bring butter to a person on a table. There is a table full of obstacles,  $n$  butters (at least one) and  $n$  people who are waiting around the table to be served by the butter. The robot has the responsibility to push the butter to a person with less possible moves. It can move in 4 ways, up, down, left and right.
- Implemented iterative deepening depth-first search (IDS) algorithm

**Sentiment Analysis:** <https://github.com/hedzd/sentiment-analysis>

**Spring 2021**

- Language: Python
- Natural language Processing (NLP)
- Deciding if a comment is negative or positive.

**Information-Retrieval Project:** <https://github.com/delaramrajaei/information-retrieval>

**Spring 2021**

- Language: Java
- Created a search engine.
- Used inverted index, tf-idf, max heap in three sections

**Theory of machines and languages:**

<https://github.com/DelaramRajaei/Theory-Of-Machines-and-Languages>

**Summer 2020**

- Language: Java
- Deciding whether the given state is accepted by DFA or NFA algorithm

**Jpotify:** <https://github.com/DelaramRajaei/Jpotify>

**Summer 2019**

- Language: Java
- Implemented Spotify. Developed an application for listening to music and can share the name of the song with your friends.

## SKILLS

### Computer Skills

- **Programing Languages**

Java, C / C++, Python, Racket

- **Database System**

MySQL

- **Web Development**

HTML, CSS, JavaScript, NodeJS, Typescript, Bootstrap4

- **Operating System**

Windows, Linux (Ubuntu)

- **Miscellaneous**

VHDL, Verilog, Boson NetSim, Wireshark, Adobe Photoshop, Word, Excel, SPSS, Java Swing, Postman, Docker, Git, Jira, Pumble, Figma

### Language Skills

- **English**

IELTS: To be taken soon.

- **Persian**

Mother tongue (Native)

## EXPERIENCE

### Teaching experience

- Teacher assistant, Principles of Computational Intelligence
- Teacher assistant Principles of Artificial Intelligence
- Teacher assistant, Software Engineering I
- Teacher assistant, Advanced programming, Java language

**Feb, 2022– present**

**Feb, 2022– present**

**Sep, 2021– Dec 2021**

**Sep, 2020– Dec 2020**

## Industry experience

### Social Sport Startup | Junior Backend Developer

August 2021– Dec 2021

- Software engineer and backend developer
- Developing a sport application using typescript

### Hengam Technology Development Co. | Internship

July, 2021– August 2021

- Software engineer and backend developer
- Learned NodeJS and typescript
- Learned how to work with docker

## CERTIFICATES

---

- Dive Into Deep Learning, Adventures with Artificial Intelligence | Amirkabir Artificial Intelligence Summer Summit Of 2020's Workshop
- Udemy The Complete NodeJS Developer Course 3<sup>rd</sup> Edition
- HTML Tutorial and Advanced | W3school
- CSS Tutorial and Advanced | W3school
- Python Tutorial | W3school

## ACTIVATES

---

- Helped on making posters, Students Scientific Chapter (SSC)
- Participated in Linux Festival, Amirkabir University of Technology, Winter 2020
- Participated in ACM Festival, Department of Computer Engineering Amirkabir University of Technology, Fall 2018

## HOBBIES

---

- Watching movies
- Playing piano
- Creating small graphic projects with photoshop

## REFERENCES

---

- **Name, Professor**  
Computer Engineering and IT Department, Amirkabir University of Technology  
Email:
- **Name, Professor**  
Computer Engineering and IT Department, Amirkabir University of Technology  
Email:
- **Name, Professor**  
Computer Engineering and IT Department, Amirkabir University of Technology  
Email:
- **Name, Professor**  
Computer Engineering and IT Department, Amirkabir University of Technology  
Email: