GitHub
LinkedIn

Aisan Sisani

+98 912 830 457
aisan.sisani@gmail.com

EDUCATION

Middle East Technical University NCC   Turkey   2017 – 2021

- **B.Sc. in Computer Engineering, CGPA: 3.99/4.0**
- **Minor in General Psychology, CGPA: 3.94/4.0**
- **Ranked 1st in the department**
- University course catalog: https://catalog.metu.edu.tr/program.php?fac_prog=355
- Elective courses: Artificial Intelligence, Computer Vision, Image Processing, Database Management Systems, Information and Network Security

Soodeh High School   Tehran, Iran   2015 – 2016

- **Pre-University Diploma in Mathematics and Physics Discipline, GPA: 19.57/20**

Soodeh High School   Tehran, Iran   2012 – 2015

- **Diploma in Mathematics and Physics Discipline, GPA: 19.97/20**

SKILLS AND EXPERTISE

- Proficient in **Python, Java, and C** Programming languages
- **Machine Learning and Deep Learning:** experience in **TensorFlow, Keras, PyTorch, scikit-learn**
- **Image Processing, Computer Vision:** experience in **MATLAB, Python**
- **Database management, design, implementation:** expert in **MySQL**, familiar with **Oracle**
- **Object-oriented languages:** C++, Java, Python, JavaScript
- **Natural Language Processing:** familiar with **NLTK**, **Spacy** libraries
- **Web Development:** React.js, JavaScript, TypeScript, HTML, CSS, PHP
- **Android Development**
- **Unity, C#, .NET Framework, Haskell, Prolog**
- **MIPS ISA, AVR** microcontroller: **Assembly language and C**
- **VHDL** hardware description language

RESEARCH EXPERIENCE

Graduation Research Project (EyeMusic)   Oct 2020 – Jul 2021

METU NCC, Turkey

- EyeMusic/EyeCon, a music player controlled by eyes through a regular phone camera.
- Analyzed previous research and application developed in the related domain.
- Produced multiple Eye-Tracking algorithms with machine learning and deep learning and compared the results and chose the best algorithm to utilize in the mobile application.
- Developed Android application controlled by the eye by using Eye-tracking, AI, and Image processing.
- This project benefits situationally induced impairments and disabilities or people with disabilities in general.

Machine Learning Research Internship — Jun 2020 – Aug 2020

Koc University, Turkey

- Usage of natural language processing, text mining, machine/deep learning, big data for data collection and management, information extraction, and text classification.
- Research on geoparsing, Named Entity Recognizers, toponym recognizers.

Undergraduate Data Science Research Assistantship

METU NCC, Turkey

- Involved in a research study that aims to predict the daily activities of people by using binary sensors.
- Reference: Hakan Yekta Yatbaz, Sukru Eraslan, Yeliz Yesilada, and Enver Ever. 2019. Activity Recognition Using Binary Sensors for Elderly People Living Alone: Scanpath Trend Analysis Approach. IEEE Sensors Journal, (SCI-E), 19, 17, 7575-7582.

TEACHING ASSISTANT EXPERIENCE

Calculus SI-PASS Program Leader — Sep 2019 – Jun 2020

METU NCC, Turkey

- Certified with SI-PASS Leadership Training
- Assisting students on their problem-solving struggles and questions
- Developed skills in leading a group, communication, and teamwork.

Teaching Assistant in C Programming Course — Jan 2019 – Jun 2019

METU NCC, Turkey

- Assisting the professor with the lesson and demonstrating fieldwork techniques in C programming courses (CNG230).

Physics Tutor — Oct 2018 – Feb 2019

METU NCC, Turkey

- Assisted students with physics questions.
- Taught students the concepts of physics covered in the course PHY105.
- Concepts: Kinematics, Dynamics, Linear Momentum, Energy.

WORKING EXPERIENCE

AI and Computer Vision Internship — Oct 2020 – Jan 2021

ISSD, Ankara, Turkey

- Applying Artificial Intelligence, Computer Vision, and Image processing techniques to real-world traffic problems.
- Project: fire/smoke detection using Deep Learning and Image Processing.

Computer Engineering Internship — Aug 2019 – Sep 2019

Reo-Tek, Ankara, Turkey

- Worked as a team member in the development of a VR Personality Test Simulator project
- Made modifications on the old existing applications and projects
- Developed cross-platform video games

HONORS AND AWARDS

Merit Scholarship   Oct 2018 – Jul 2021

METU NCC, Turkey

- Awarded with this scholar each consecutive semester since 2018 (since candidates must complete the first two semesters of a program).
- This Scholarship is given each semester to students whose CGPA has placed them among the top 3% of the total undergraduate students enrolled in that program.

Tuition Waiver Scholarship

METU NCC, Turkey

- This scholarship waived 75% of the B.Sc. degree tuition, covering all the semesters enrolled

Dormitory Scholarship

METU NCC, Turkey

- This scholarship waived the dormitory fee located in the Northern Cyprus Campus.
- This Scholarship is given to the

Second place in Math Olympiad competition   Oct 2019

METU NCC, Problem Solving Society

- A competition similar to math Olympiad competitions designed by the problem-solving society at METU NCC

Second place in programming competition CODE GO   Mar 2019

METU NCC, Problem Solving Society

- A programming competition designed by IEEE and problem-solving society at METU NCC

Physics Olympiad   Feb 2014

Tehran, Iran

- I passed the first stage of the Physics Olympiad in Iran while in the second grade of high school, I could not continue to the next stages due to financial issues.

SELECTED PROJECTS

EyeMusic *(repo)*   Oct 2020 – Jul 2021

Android Application that allows controlling the UI using eye gaze.
Graduation Research Project at METU NCC.

METU NCC Ride Share *(repo)*   Jun 2021

A web-based system that aims to assist METU NCC students with limited transportation in North Cyprus.
Developed Using MySQL, PHP, HTML and CSS.

Eye Tracking For Eye Music *(repo)*   Oct 2020 – Jan 2021

Eye tracking algorithms developed in python as a research process while developing EyeMusic.

Multi-Threaded-Text-Editor *(repo)*   **Mar 2020**

Text editor developed in java, facilitating spelling check in a parallel thread.

MIPS Assembler *(repo)*   **Oct 2019**

Assembler for the MIPS ASM language written In C++.

4-bit FPGA Calculator *(repo)*   **Mar 2019**

basic 4-bit calculator on the Altera Cyclone III 3C16 FPGA device (DE0 board) able to perform 16 different operations like addition, subtraction etc.. Constructed the project out of modular bits, for it's own Registers, Finite State Machine, Arithmetic Logic Unit etc. Used Quartus as the IDE. Also used various digital logic circuits (alongside VHDL) for some parts of the project

LANGUAGES

- **Persian**: Native
- **English**: Full fluency
- **Turkish**: Advance

REFERENCES

Assoc. Prof. Dr. Yeliz Yeşilada
Associate Professor in Computer Engineering Department
Middle East Technical University, North Cyprus Campus
Email: *yyeliz@metu.edu.tr, yeliz.yesilada@manchester.ac.uk*
Web: *http://www.yelizyesilada.com*

Assoc. Prof. Dr. Enver Ever
Associate Professor and Coordinator of Computer Engineering Department
Middle East Technical University, North Cyprus Campus
Email: *eever@metu.edu.tr*

Instr. Dr. Sukru Eraslan
Instructor and researcher in the Computer Engineering Department
Middle East Technical University, North Cyprus Campus
Email**:** *seraslan@metu.edu.tr, eraslan.sukru@gmail.com*
Web: *http://users.metu.edu.tr/seraslan/index.html*

Assoc. Prof. Dr. Asli Niyazi
Associate Professor in Psychology Department
Middle East Technical University, North Cyprus Campus
Email**:** *nasli@metu.edu.tr*