# **Aybars Yazici**

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Gender: Male Date of birth: 10/10/1998 Nationality: Turkish

# **ABOUT ME**

For a more interactive way to learn about me, please check my portfolio website.

### **PROJECTS**

### [ 09/2023 ]

# Investigating the Effectiveness of Al-Generated Examples for Learning

Publication at CHI 2024.

Research Project at ML for Education Lab. at EPFL. The project aims to investigate the potential of LLM for personalizing educational content. Research question(s): (1) Can we use LLM to generate domain and user specific examples and explanations/advices? (2) How do these examples compare to peer/expert generated examples? (3) Is it possible for LLM to learn what the common mistakes and patterns for a specific domain are?

Link: https://dl.acm.org/doi/10.1145/3613905.3650900

### [ 09/2024 - 01/2025 ]

### **Peace Mediator Assistant**

Thesis done at the LSIR lab at EPFL.

Develop a tool that leverages the capabilities of Large Language Models (LLMs) to extract, analyze, and summarize important information from news articles. It focuses on identifying the main political issues, the stakeholders involved in these conflicts, and their respective positions, sentiments, emotions, and stances. The primary purpose is to assist mediators in conflict analysis and the settlement of disputes by providing them with detailed insights derived from news sources.

## [ 03/2023 – 06/2023 ]

### Satellite Visualizer

A website that visualizes the satellites orbiting the Earth, done as a project for <u>Data Visualization</u> course at EPFL.

Link: https://com-480-data-visualization.github.io/project-2023-astro-vizards/

## Time series student performance prediction

I along with 2 other team members, worked with data provided by a start up (lernnavi), to come up with, train and test several machine learning algorithms to cluster students using the platform into groups and try to predict their performances of week N, using the data available from weeks 1...N-1

Link: https://github.com/ML4BD/final-submission-uclumasa

# [ 10/2022 - 01/2023 ]

# **Brain Fingerprinting and Task Decoding via Graph Structure Learning**

A project that aims to investigate the use of graph structure learning (GSL) methods to construct alternative graphs to so called functional connectivity (FC) graphs where a brain graph is derived based on pairwise functional correlation between activity in brain regions. Conducted as a course project for ML course at EPFL under the supervision of Medical Image processing Lab.

Link: https://drive.google.com/file/d/1sqEazi1b93ltYfkUFU4iQcDDFkNtxzZX/view?usp=sharing

### [ 09/2021 - 01/2022 ]

## **Digital Game Library Database Application**

Developed a game library database application utilizing ReactJS, along with express for setting up endpoints for the frontend application. Utilized ER Model for designing, concepts of 3rd Normal form for refining and MySQL for implementing the database.

### WORK EXPERIENCE

### [ 02/2024 - 08/2024 ]

# **Machine Learning Engineer**

Visium

City: Lausanne | Country: Switzerland

Worked as a Junior ML Engineer to create AI models to suit client needs.

Some implemented/worked on concepts:

- Implicit Deep Learning Recommender systems
- Document line item OCR + classification
- Retrieval Augmented Generation

Utilized PyTorch, DVC, Docker along with Google Cloud(Cloud run apps, Firestore DB) for the backend of the ML pipeline and Firebase, React|S for the frontend.

### [ 09/2023 - 01/2025 ]

# **Graduate teaching assistant**

**EPFL** 

Country: Switzerland

Worked as a graduate level teaching assistant (Assistant étudiant) for Machine Learning (CS-433) [09/2023-01/2024] and TCP/IP(COM-407)[09/2024-01/2025] course at EPFL.

- Prepared weekly exercises.
- Organized and graded projects.
- Helped students during exercise sessions

### [ 09/2020 – 11/2022 ] **Web developer**

Spiky AI

Used several frontend and backend frameworks to design and develop admin panels, product websites. (VueJS, NuxtJS, ReactJS, Django Python, Spring Boot Java)

# [ 12/2021 – 06/2022 ] **Software Developer**

**Evet Tech** 

Country: Türkiye

Worked primarily as a .NET Developer. Utilized ASP.NET framework along with MVC structure to:

- 1. develop new web pages using |Query and razor web pages in older projects. And React|S in newer projects.
- 2. create, maintain and consume azure functions and deploy new functions apps to the Microsoft Azure portal
- 3. monitored, debugged and optimized an already existing large .NET codebase and MS SQL DB.

# [ 06/2021 – 11/2021 ] **Web developer**

Vaysis

Country: Türkiye

Used spring boot Java for the backend and ReactJS with TypeScript for the frontend to develop dashboards, landing pages and commercial websites. Utilized Nx Project structure.

### [ 09/2018 - 06/2020 ]

## University teaching assistant

# Sabanci University

Country: Türkiye

Worked as an Undergraduate level teaching assistant for many courses throughout my education:

Undergraduate Level Teaching Assistant for Data Structures Course(CS 300)[09.2019 - 06.2020]

- Prepared and graded homework.
- Held office hours, recitations, conducted review and discussion sessions weekly to help students with concepts they were struggling with.

Undergraduate Level Teaching Assistant for Circuits II Course(EE 202) [01.2020 - 06.2020]

- Worked as a supervisor in lab hours to help students implement topics learned in lectures.
- Graded and prepared lab assignments and homework.
- Held office hours and discussion sessions to help students with assignments.

Undergraduate Level Teaching Assistant for Calculus II Course [09.2018 - 01.2019]

• Held recitations to solve example questions and re-explain topics went over in the lectures.

- · Graded homework and guizzes.
- Proctored exams.

# [ 06/2020 - 09/2020 ] **Software developer**

PI Works

Country: Türkiye

Summer Internship,

- Worked on projects involving both the telecommunications layer and software layer.
- · Focused on database management, audio streaming, evaluating wireless network performance, and identifying ways to improve upon it.
- · Gained insight into the common issues faced by telecommunication systems and their solutions.

### **EDUCATION AND TRAINING**

# [ 09/2022 – Current ] MSc in Computer Science

**EPFL** https://www.epfl.ch/en/

Address: Rte Cantonale, , 1015 , Lausanne, Switzerland | Final grade: CGPA 5.64/6.0

[ 17/09/2017 - 04/2022 ]

# **Computer Engineer & Electronics Engineer Double major**

Sabanci University https://www.sabanciuniv.edu/en

Address: Orta, Üniversite Cd., Tuzla/İstanbul, 34956, İstanbul, Türkiye | Final grade: 3.84/4.00

# **LANGUAGE SKILLS**

Mother tongue(s): Turkish

Other language(s):

# **English**

LISTENING C2 READING C2 WRITING C2

**SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2** 

### **French**

LISTENING B2 READING B2 WRITING B2

**SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2** 

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

## **HONOURS AND AWARDS**

# [ 12/2017 ] High honor certificate Awarding institution: Sabanci University

High honor certificate awarded for academic success during a semester in Sabanci University.

Received one of these in each of the following semesters:

12/2017 - 06/2018 - 12/2018 - 06/2019 - 12/2019 - 06/2020 - 01/2022