# Bermet Mamatova

Üllői út 121, Budapest, 1096

#### Education

#### Eötvös Loránd University

Bachelor of Science in Computer Science

Budapest, Hungary

Sep. 2022 - July. 2025

#### Relevant Coursework

- Data Structures and Algorithms I/II
- Java
- Applied Data Science
- Web programming

OOP

- Computer Systems
- Python

# **Projects**

# The Map Maker game | JavaScript, HTML, CSS

Autumn 2023

• Created a single-player game that challenges the user to place map elements of various shapes and terrain types on an 11x11 square grid map. Each element has a time value (1 or 2) and the game lasts for 28 time units. The game performs a number of checks (missions) against the current state of the grid at the end (or during) the game, and calculates the final score accordingly.

## Telegram bot for managing events and tasks | Java, Spring

**Summer 2023** 

• Created a telegram bot in Java that allows users to register for events and receive reminders so that a user never misses what is important. The bot also collects information about users to facilitate the registration process.

#### Smart Home IoT Automation Simulator GUI | Python, tkinter

Winter 2023

• I created a Python-based IoT device simulator that can mimic the behavior and data generation of various types of IoT devices, such as smart thermostats, light bulbs, or cameras. The simulator can also perform basic data analytics and processing on the sensor data, such as filtering, aggregation, or anomaly detection. To visualize the sensor data and the analytics results, I designed an attractive and interactive monitoring dashboard that can show different charts, graphs, and widgets. To implement the simulator, I used various Python features and tools, such as data structures, classes, OOP objects, instance and class variables, OOP methods, pip, static methods, files, standard library, exception handling, modules, and packages.

#### Skills

Programming Languages: Java, Python3, C#, C, JavaScript, SQL, Clean, PHP

Advanced: Algorithms and Data Structures, Unit/Integration testings

Technologies: Unix/Linux, Windows, AWS Cloud Environment

Soft Skills: Problem-solving, communication, analytical thinking, leadership, ability to learn fast and stay curious

# Achievements/Certificates

# IoT Fundamentals: Big Data and Analytics

Winter 2023

Student

Cisco Networking Academy and ELTE

• My learning journey involved data analytics for IoT solutions, which can help me gain insights, optimize systems, and enable new services and business models. I followed the data analysis process, using different tools and techniques. Python scripts and various libraries and frameworks helped me collect, prepare, analyze, and visualize or export data.

# "Portfolio" summer school

Summer 2023

Student

ELTE, Faculty of Informatics

• Participated in an intensive one-week summer school on "Democratizing technology and technology for democracy" focused on leveraging technology to address social challenges within our community.

## Stipendium Hungaricum Scholarhsip

Autumn 2022 - Present

 $Scholarship\ holder$ 

Tempus Public foundation

• Awarded a full scholarship to pursue a Bachelor's degree in Computer Science at ELTE University.

#### Future Leaders Exchange Program (FLEX)

**Spring 2018 – Summer 2019** 

Scholarship holder, alumna

United States Department of State

• Secured a scholarship for an exchange year in the USA, ranking among the top 100 out of 3000 applicants in Kyrgyzstan.