

BURAK YILDIZ

Çankaya, Ankara, Turkey ♦ +90 554 673 3340

✉ burakyildiz310@gmail.com

🌐 burakyildiz.dev

🌐 [/burakyildiz0](https://www.linkedin.com/company/burakyildiz0)

🐙 [/burakyildiz](https://github.com/burakyildiz)

EDUCATION

Middle East Technical University (METU), Bachelor of Computer Engineering Sep 2019 – Jan 2026

Relevant Elective Courses: Game Development Pipeline (graduate-level), Game Metrics (graduate-level), Object-Oriented Programming, Software Construction

TECHNICAL SKILLS

Programming Languages	C++, C#, Java, Python
Game Development	Unity (2D/3D), Physics, UI Systems, Animator, DOTween
Gameplay Systems	Match/blast detection, combos, gravity refill, level progression
Game AI	Grid pathfinding, state machines, enemy behaviour
Architecture & Tooling	Object pooling, factories, ScriptableObjects, custom editors
Tools	Git/GitHub, Unity Profiler

EXPERIENCE

AI/ML Researcher Jun 2025 – Sep 2025
METU DTX *Ankara, Turkey*

- Programmed ESP32 boards to collect BLE RSSI data for the [Real-Time Location System \(RTLS\)](#) project and migrated the backend to Google Firebase Realtime Database.
- Benchmarked kNN, Random Forest, SVM and XGBoost models against a trilateration baseline, applying Kalman filtering and feature engineering to reduce BLE signal noise.
- Collaborated with faculty on applied ML/IoT research, delivering technical reports and performance evaluations.

Software Engineer Intern Jun 2024 – Aug 2024
Intertech *Istanbul, Turkey*

- Developed an AI-driven [personal-finance chatbot](#) by integrating Microsoft Azure OpenAI and Cognitive Search services.
- Built a responsive React + TypeScript web application for end-user interaction with the chatbot.
- Deployed and tested containerized microservices using Kubernetes.

PROJECTS

Elemental Planets — 3D RPG Game (Unity, C#). Developed as a term project for the *Game Development Pipeline* course. Implemented core RPG systems with elemental-based combat mechanics, quest progression, inventory management, and character interactions. Designed and integrated 3D environments and gameplay. [GitHub Repository](#)

Tetris3D — 3D Tetris Game Engine (C++, OpenGL). Built a fully interactive 3D Tetris game engine from scratch using modern OpenGL. Implemented custom rendering pipeline, real-time camera controls, collision detection, input handling, and core game loop logic. Focused on performance optimization and clean engine architecture. [GitHub Repository](#)

Multiplayer Uno — Online Card Game (Java, JavaFX, Spring Boot). Designed and implemented a multiplayer Uno game as a term project for the *Software Construction* course. Developed a JavaFX-based client and a Spring Boot backend supporting real-time lobby management, turn-based game logic, and user authentication. [Frontend](#) / [Backend](#)