

Emirhan Tandoğan

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İstanbul, Turkey

EDUCATION

• Ozyegin University

Sept 2021 - June 2025

B.Sc. in Computer Science, Faculty of Engineering, 4th Grade

İstanbul, Turkey

- Graduated with distinction, ranked 4th in the department with a specialization in Artificial Intelligence & Data Science
- Recipient of a Merit-based Scholarship for Academic Excellence
- CGPA: 3.69/4.00

• TED Kdz. Ereğli College

Sept 2017 - June 2021

Secondary Education

Zonguldak, Turkey

- GPA: 99.66/100
- Awarded 100% tuition waiver for success in High School Entrance Exam

EXPERIENCE

• Ozyegin University [🌐]

August 2023 - January 2025

Research Assistant

İstanbul, Turkey

- Developed a Multi-CDN switching system based on client side and server side performance metrics to optimize content delivery and demonstration websites.
- Implemented a content steering server, enhancing new conditions and algorithms for CDN switching.
- Utilized a broad range of technologies, including JavaScript, Node.js, Service Workers to develop the systems and Python, Docker, Postman, AWS, Netem, SQLite to test the system on various network conditions with multiple clients, collecting and analyzing performance data.

• TaleWorlds Entertainment [🌐]

August 2024 - September 2024

Software Developer Intern

Ankara, Turkey

- Worked on an unannounced game in Unity (C#), contributing to new features, UI enhancements, and AI bug fixes.
- Fixed AI attack patterns and enhanced enemy behavior with ray-casting, developed an in-game inventory system, shaders, and dynamic particle effects to optimize visuals.
- Conducted extensive game testing to resolve bugs and integrate new mechanics seamlessly into the codebase.

• ASELSAN [🌐]

June 2024 - July 2024

Software Developer Intern, Land and Naval Command Control Software Design Directorate

Ankara, Turkey

- Developed a Subsystem Interface Unit (SIU) for the VATOZ software family using Java, enabling device communication via UDP and IDL while following the MVC architecture with a Java Swing UI for real-time status updates and error reporting.
- Implemented DDS for scalable, real-time data exchange using a decentralized publish-subscribe model.
- Conducted testing and debugging with Docklight for message simulation and Wireshark for network analysis and performance optimization.

PROJECTS

• TicketToAI: Developing a Reinforcement Learning Agent for Ticket to Ride Board Game

October 2024 - June 2025

Language & Tools & Libraries: Python, Tkinter, multiprocessing

- Developing a digital version of the Ticket to Ride board game, a tournament panel for managing multiple concurrent AI matches for performance evaluation and a console interface for debugging the game.
- Designing a Reinforcement Learning Agent to make optimal in-game decisions.

• BidBot: The Adaptive Negotiation Agent

February 2024 - May 2024

Language & Tools & Frameworks: Python, NegMAS, BOA Framework

[ANAC2024, ANL2024]

- Developed an adaptive negotiation agent for the ANL 2024 competition using the NegMAS framework, featuring modular architecture for dynamic bidding, opponent modeling, and strategy adaptation.
- Ranked 9th out of 40 agents in the ANL 2024 competition and were invited to participate in the final stage of the competition held in New Zealand.

• Dream Dungeon: Rogue-Like Game Project

February 2023 - July 2023

Language & Libraries & Tools: C#, Unity, Built-in 2D URP System, NavMeshPlus, Adobe Photoshop

[🎮]

- Designed and developed Dream Dungeon, a 2D Top-Down Shooter Rogue-Like mobile game with randomized dungeon generation, unique enemies, and progressive difficulty for varied gameplay experiences.

• Party Hide: Online Hide and Seek Party Game Project

February 2023 - July 2023

Language & Libraries & Tools: Unity, C#, Photon Engine, Built-in NavMesh, Blender

[🎮]

- Designed and developed Party Hide, a 3D third-person multiplayer game with hide-and-seek modes, custom lobbies, character creation, AI-driven gameplay, and fast networking using Photon Engine.

SKILLS

- **Programming Languages:** Java, Python, C#, C++, MATLAB, JavaScript
- **Web Technologies & Networking:** NodeJS, Service Workers, AWS, Postman, Wireshark, Docklight, Netem
- **Game Development:** Unity, Photon Engine, Blender, Adobe Photoshop
- **Tools & Frameworks & Version Control:** Docker, Java Swing, SQLite, MySQL, Tkinter, Git, PlasticSCM
- **Soft Skills:** Team Collaboration, Communication, Problem-Solving, Time Management, Adaptability

ADDITIONAL INFORMATION

Languages: Turkish (Native), English (Advanced), German (Beginner)

Interests: Software Development, Game Development, Artificial Intelligence, Web Technologies

ACTIVITIES

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| • Active Member, Ozyegin University IEEE | Sept 2021 - June 2023 |
| • Active Member, Ozyegin University Art Club | Sept 2021 - June 2023 |
| • Active Member, Ozyegin University Business Club | Sept 2021 - June 2023 |