

Kaan Kara

Mobile & Game Developer · AI/ML Researcher

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🌐 [github.com/Kaan-](https://github.com/Kaan-commits)

[commits](#) [🌐 linkedin.com/in/kaankara-104851252](https://www.linkedin.com/in/kaankara-104851252) · Istanbul, Türkiye

EXPERIENCE

Founder & Lead Developer · Frozen Duck Games · Istanbul, Türkiye

Jun 2020 – Present

- ▶ **Lead developer & founder** — founded independent game studio; currently developing two Unity titles simultaneously
- ▶ Full-stack ownership: game design, C# programming, UI/UX, and graphic design
- ▶ Mobile development and publishing pipeline for both iOS and Android platforms

Principal Investigator · TÜBİTAK 2209-A Research Grant · Istanbul, Türkiye

Nov 2025 – Present

- ▶ Led funded research on reward-punishment learning in Spiking Neural Networks (SNNs)
- ▶ Developed LIF and Izhikevich neuron models with STDP-based learning on the Brian2 platform; implemented dopamine-like global reward signals for cognitive task training (light-response learning and a Pong-style game)
- ▶ Authored a scientific article currently in preparation for peer-reviewed journal submission
- ▶ **Speaker at SIU 2026 (Signal Processing and Communications Applications Conference)** Accepted as a
- ▶ **Peer reviewer at SIU 2026** Served as a

Software Development Intern · Paper Pigeon Games · Istanbul, Türkiye

Jul 2025 – Sep 2025

- ▶ Unity and C# development for mobile game projects; graphic design contributions

Software Development Intern · Trackon Software DMCC · Dubai, UAE

Aug 2024 – Sep 2024

- ▶ Backend and frontend development using Jinja, Python, and C#

Software Development Intern · Paper Pigeon Games · Istanbul, Türkiye

May 2024 – Aug 2024

- ▶ Unity and C# development; contributed to mobile game pipeline and graphic design

App & Web Lead · Teknofest — Bytekurt Team · Istanbul, Türkiye

Jul 2023 – Sep 2024

- ▶ Led mobile application and web development for a disaster-response hexacopter system in the Teknofest Technology for Humanity competition

- ▶ Managed full project lifecycle: planning, mobile app development, and web integration

Student · 42 Turkey · Istanbul, Türkiye

Oct 2023 – Nov 2023

- ▶ Intensive peer-learning program; C and Swift development in a project-based environment

Participant · Digiage — Bilişim Vadisi · Kocaeli, Türkiye

Jan 2022 – Jan 2022

- ▶ Unity, C# and graphic design workshop; early-stage game development experience

PROJECTS

1Üni — Campus Super App · Sole Developer

2025 – Present

- ▶ Designed and built a full-featured campus companion app from scratch — published on both platforms (iOS and Android)
- ▶ Single-tap access to all campus services: announcements, schedules, surveys, and resources
- ▶ Push notifications, interactive student surveys enabling iterative product improvement, and Firebase/Supabase database integrations
- ▶ Full-stack solo development: Android Studio, Flutter (Dart), iOS & Android publishing

“GORA” Skill Injection — Graduation Project · Biruni University

2025 – Present

- ▶ Investigates martial arts skill transfer between SNN agents using STDP-based weight injection, inspired by motor learning research
- ▶ Designs biologically plausible synaptic weight transfer mechanisms between trained neural agents
- ▶ Novel scientific contribution to neuromorphic computing and bio-inspired AI; submission to relevant conferences and journals planned upon completion

EDUCATION

B.Sc. Computer Engineering · Biruni University · Istanbul, Türkiye

2022 – Present

- ▶ 8th semester (4th year) student — Turkish-medium program

SKILLS

Languages & Frameworks: C#, Python, Dart/Flutter, Swift, C, HTML, Jinja

Tools & Platforms: Unity, Android Studio, Firebase, Supabase, Brian2, Git/GitHub

Mobile: iOS & Android development and publishing (App Store, Google Play)

Research: Spiking Neural Networks, STDP, Reinforcement Learning, Brian2 simulations

Design: UI/UX Design, Graphic Design

AWARDS & ACHIEVEMENTS

- ★ Three-time school champion in Waterloo University international math competitions (Pascal, Cayley & Fermat) — recipient of Canadian medal
- ★ 10th place in Istanbul, Cezeri (Computer Mathematics) — National Science Olympiad, Türkiye
- ★ Cambridge University English exams: Starters, Movers, Flyers, KET, PET — all passed

LANGUAGES

Turkish (Native) **English** (Advanced / C1) **French** (Beginner) **German** (Beginner)

INTERESTS

Music · Sports · Travel (12 countries) · Drawing · Photography