

Portfolio overview

Open to full-time roles

Uğurcan Eser

Full-Stack Software Engineer

With 7+ years of experience, I build and ship web, mobile, AI-powered, real-time and IoT systems, from first prototype to App Store release and cloud deployment.

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linkedin.com/in/ugurcaneser github.com/ugurcaneser

Selected work

Products I designed and built on my own, from the first commit to the store listing.

Hexsmith

A nut-sort puzzle game for iPhone and Android with 300 solver-checked levels

Mobile game

Role Solo developer

Status

Live on the App Store for iPhone and iPad; the Android version is being prepared for Google Play

- 300 levels, every one checked by a solver before it ships, with eleven mechanics such as hidden nuts, frozen and locked bolts, bombs and chameleon nuts, each introduced with a short card
- Undo, hint, extra bolt and shuffle boosters, coins and stars, daily rewards and streaks, a puzzle of the day and a workshop that is restored with stars
- A level pipeline in TypeScript: reverse-scramble generator, BFS solver, a difficulty model with bot players and curve-driven curation, plus a web level editor
- One codebase for the game, the editor, the solver and a playable ad: PixiJS renderer in a Capacitor shell, free, offline, no ads, no account

TypeScript · PixiJS · Capacitor · Vite · iOS · Android

App Store · Website · Project page



Barbar Smash

A 3D restaurant rush game in the browser for a smash burger restaurant

Browser game

Role Solo developer

Status Live in the browser on the restaurant's website, made for guests waiting for their food

- Ten days of seating, serving and billing hungry barbarians, with orders from the restaurant's real menu, chains, thrown drinks and a SMASH that clears the kitchen
- Three.js scene with toy-diorama models written as Blender Python scripts, plus music, effects and voices synthesized with Web Audio
- Deterministic integer simulation: a half-finished day resumes from its command log, and bots tune the star targets
- About 1,840 unit tests and 300 Playwright tests, with performance budgets for three quality tiers

TypeScript · Three.js · WebGL 2 · Blender · Web Audio · PWA

Play in browser · Project page

Budgetory

A multi-currency personal finance app for iPhone and Android

iOS & Android app

Role Solo developer

Status Live on the App Store for iPhone; new iOS and Android versions in review

- Income, expenses, budgets, savings goals, accounts, recurring transactions, credit cards with installments and holdings such as gold and foreign currency
- Offline first: idempotent writes and client-generated IDs, so the app stays usable without a connection
- Home-screen widget with a safe-to-spend forecast, fed by a shared snapshot with no network calls
- Custom Swift and Kotlin modules, over-the-air JavaScript updates, six languages, full accessibility support

React Native · Expo · TypeScript · FastAPI · PostgreSQL

App Store · Project page



Stamp

A desktop app for Linux, macOS and Windows that formats SD cards as FAT32 at any size and loads a zip onto them

Desktop app

Role Solo developer

Status Open source under the MIT license; releases for Linux, macOS and Windows

- Formats as FAT32 at any size, which the stock formatters refuse above 32 GB, then copies a zip onto the card
- Three native apps: GTK4 and libadwaita on Linux, SwiftUI on macOS, WPF on Windows, sharing one UI-free core per platform
- Safety first: the system disk can never be selected, every step is logged and the zip is checked before anything is erased
- On Windows the FAT32 structures are written by hand; 158 tests across the three apps, packages built in CI

Python · GTK4 · SwiftUI · C# · WPF

GitHub · Releases · Project page



Scrap Baron

A pixel-art scrapyard tycoon game for phones and the browser

Game

Role Solo developer

Status Playable in the browser now; iOS and Android versions being prepared for release

- A day in four phases: set prices, weigh and haggle at the scale, sell to wholesalers, read the report; catch fraud with a magnet or by tipping the sack
- Three tiers from a neighbourhood yard to a recycling plant, 25 achievements, 18 cosmetics and an endless mode
- No game engine: Canvas 2D at integer scale, all art painted in code, synthesized Web Audio, about 160 KB gzipped

- Deterministic, seeded simulation with exact save restore; about 330 unit tests and 28 end-to-end tests

TypeScript · Canvas 2D · Capacitor · PWA · Web Audio

Play in browser · Project page



Pizza Assassin

A comedic pixel-art stealth platformer for iPhone and Android

Game

Role Solo developer · Status Being prepared for release on the App Store and Google Play

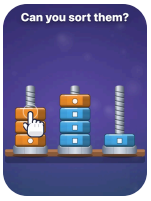
- 40 levels across 6 worlds: guards patrol, investigate and chase; lure them with a slice, hide under a pizza box or turn off the lights
- Three stars per delivery, 120 hidden toppings, ghost runs, outfits, 18 achievements and leaderboards on Game Center and Play Games
- Levels are ASCII maps and the pixel art and chiptunes are generated by scripts; game logic runs without the scene tree
- 371 unit tests, 18 scripted playthroughs and store automation for six languages

Godot 4 · GDScript · Pixel art · iOS · Android

Website · Project page

Playables

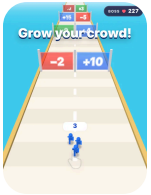
Small browser games set in Istanbul and playable ads built for ad networks. All of them run on this site.



Nut Sort

Playable ad · v0.1

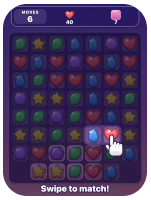
Play



Crowd Runner

Playable ad · v0.1

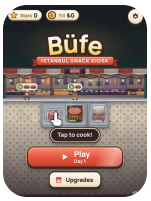
Play



Gem Burst

Playable ad · v0.1

Play



Büfe

Kiosk sim · v0.2

Play



Hamal: Don’t Drop It!

Balance · v0.3

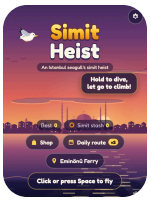
Play



Dolmuş: Next Stop!

Puzzle · v0.4

Play



Simit Heist

Arcade · v0.4

Play

Experience

Yeterly AI

Feb 2025 – May 2026

Software Engineer · Edirne · Remote

Built production web and mobile apps with React, Next.js, React Native and FastAPI; took them through App Store and Google Play release, integrated LLM features, and built Unreal Engine 5 simulations on AWS and Azure.

Odine Solutions

Feb 2025 – May 2026

Software Engineer · Remote · Client assignment

Embedded on an industrial IoT project: real-time Digital Twin interfaces that visualize live telemetry, plus browser-based simulation tools driven by streaming data.

Vorforge

Jan 2023 – Feb 2025

Software Engineer · Ankara · Remote

Developed automation system software in Python and TypeScript, built IoT device software on Raspberry Pi and ESP32, and wrote embedded C for ESP32 microcontrollers with a focus on stability and maintainability.

Upwork

Jan 2020 – Jan 2023

Freelance Software Engineer · Remote · Top Rated

Delivered production web and mobile apps for international clients with React, React Native and TypeScript; earned Top Rated status and repeat work, largely through referrals.

Game Studio (NDA)

Jan 2020 – Jan 2022

Game Developer · Remote

Developed browser games with HTML5, Phaser.js and PixiJS: gameplay systems, animation and asset pipelines for web delivery.

Playable Factory

Apr 2019 – Jan 2020

Game Developer · Istanbul · On-site

Built playable ads with Phaser.js for mobile ad networks, turning brand briefs into interactive creatives with design and marketing teams.

Education

M.Sc. Computational Science & Engineering

2018 – Present

Istanbul Technical University · In progress

Parallel computing, machine learning, numerical methods and scientific computing. Studies interrupted; resumed in 2026.

Research Project

2018 – 2019

Istanbul Technical University

Developed and evaluated machine-learning methods for molecular-scale quantum calculations with NumPy, SciPy and Pandas.

Research Project

2015 – 2016

Mimar Sinan Fine Arts University · TÜBİTAK

Contributed to a TÜBİTAK-supported academic software project under faculty supervision and received a project scholarship.

B.Sc. Mathematics

2012 – 2016

Mimar Sinan Fine Arts University · TÜBİTAK scholar

Focused on artificial neural networks, game theory and the mathematics behind computer science.

Skills

CORE STACK

React Web & mobile UI

Next.js React framework

TypeScript Typed JavaScript

Python Backend & data

FastAPI API framework

PyTorch Machine learning

Three.js 3D on the web

Unreal Engine 5 Real-time 3D

ALSO

React Native

AWS

Azure

Firebase

LLM integrations

C

ESP32

Raspberry Pi

Phaser

PixiJS

TensorFlow

Flutter

SwiftUI

Node.js