

Kent Umut

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TECHNICAL SKILLS

- **Languages:** TypeScript, Python, Java, C, SQL, HTML/CSS
- **Frontend & Mobile:** React, React Native, Expo, Tailwind CSS, TanStack Query, NativeWind
- **Backend & Architecture:** Node.js, NestJS, FastAPI, Fastify, Spring Framework, Prisma ORM, Turborepo (Monorepo)
- **Cloud & DevOps:** AWS (ECS Fargate, RDS, ElastiCache, ALB, CDK), Docker, Terraform, CI/CD
- **AI & Data:** RAG, Vector DBs (Qdrant), Local Embeddings (ONNX), STT/TTS, WebSockets

EDUCATION

Bachelor of Science in Computer Science

ETH Zürich

Zürich, Switzerland

Sep 2025 – Present

- Studying Computer Science at Switzerland's leading university, consistently ranked #1 in Europe and #3 globally for the discipline.
- Relevant Coursework: Linear Algebra (Grade: 5.5/6.0), Introduction to Programming (5.0/6.0), Algorithms and Data Structures, Discrete Mathematics.

High School Diploma (Matura)

St. Georg Austrian High School

Istanbul, Türkiye

Sep 2020 – Jun 2025

- Graduated with a 1.1 Matura (4.0/4.0 GPA), ranking #1 academically for three consecutive years.
- Served as Model United Nations (MUN) President, organizing a conference with 200+ participants.

WORK EXPERIENCE

Software Engineer Intern

Defne Telecommunications (5G Telecom Software)

Istanbul, Türkiye

Nov 2024

- Developed scalable, high-performance telecom solutions using Java and Spring Framework.
- Designed and implemented robust backend systems and integrated RESTful APIs.
- Contributed to full-stack development utilizing React.js, Node.js, and TypeScript, while collaborating on CI/CD pipelines to streamline deployments.

Head of Marketing & Treasury

Claude Builder Club

Zürich, Switzerland

Oct 2025 – Present

- Led marketing strategy, social media channels, and visual asset creation to scale visibility and student engagement at ETH Zürich.
- Organized and promoted technical events, including an AI builder workshop and mini hackathon.
- Managed treasury responsibilities including budgeting, sponsorship coordination, and financial planning.

Co-Founder & General Director

Kolektif Olusum

Istanbul, Türkiye

Nov 2023 – Mar 2025

- Built and maintained the digital infrastructure (kolektifolusum.org) for a 10,000+ member student network across 8 countries, enabling large-scale community engagement.
- Directed organizational strategy, international expansion, and drove cross-city partnerships.

Intern

Porty Tech

Istanbul, Türkiye

May 2023 – Nov 2023

- Collaborated closely with the founder and CEO of a \$1M+ funded rentable powerbank startup (working with 3000+ stores, malls, restaurants, and bars) to build and scale a technology-driven product.
- Implemented data-driven marketing ideas that were successfully adopted by the firm to drive business growth.

PROJECTS

Mira – Autonomous Voice AI Agent | TypeScript, Fastify, Qdrant, AWS, Terraform, Turborepo

- Engineered an ultra-low latency (<2s) voice AI customer service agent using a custom binary WebSocket protocol and direct STT/TTS API integrations, eliminating HTTP hop overhead.
- Implemented speculative RAG pre-fetching with Qdrant and local ONNX embeddings (all-MiniLM-L6-v2), optimizing response times by 1200ms and removing secondary LLM calls.
- Designed a parallel TTS queue and smart sentence buffering system, reducing audio generation latency by 43% and enabling seamless, interruption-ready (barge-in) conversations.

Gym PT Booking & Messaging App | React Native, NestJS, PostgreSQL, Prisma, Socket.IO, AWS CDK

- Developed a full-stack monorepo application for gym management, featuring real-time messaging and booking via WebSockets, with a high-performance React Native (Expo) mobile client.
- Architected and provisioned scalable, secure cloud infrastructure using AWS CDK, deploying the NestJS backend to ECS Fargate and PostgreSQL to isolated RDS subnets.
- Implemented robust authentication using Passport.js (JWT) and automated API client generation using Orval and Swagger.

LANGUAGES

- English (C1), German (C1), Turkish (Native)