Umut Şen

Denizli, Turkey | +90 538 790 78 42 | umutsen2662@gmail.com

umutsen.dev | github.com/UmutSen2662 | linkedin.com/in/umutsen-dev

Education

Middle East Technical University (METU)   2021 – 2026
B.S. in Computer Engineering (3.8 GPA)   *Northern Cyprus Campus, TRNC*

Experience

Backend Developer Intern   July 2025 – August 2025
Orion Innovation   *Remote*
- Contributed to an enterprise Java Spring Boot project alongside an 18-person Agile team
- Implemented transactional audit logging to ensure data integrity and compliance
- Optimized system performance using Aspect-Oriented Programming (AOP) techniques

Full-Stack Developer Intern   June 2024 – August 2024
3D ProBox   *Hybrid*
- Developed custom Framer and Webflow plugins to enable no-code embedding of 3D models
- Integrated Supabase for edge caching, improving query latency and minimizing repeated server requests
- Implemented client-side fuzzy search logic to enable efficient real-time model discovery

Projects

ChatApp   chatapp.umutsen.dev
- Built a real-time browser-based audio streaming application using WebRTC with a custom signaling protocol over Supabase Realtime
- Improved client performance by compressing images in the browser (Canvas → WebP) before transmission
- Fixed WebRTC connection race conditions using asynchronous candidate queueing, ensuring stable real-time communication
- Designed a real-time synchronization engine using PostgreSQL Change Data Capture (CDC) and Supabase Edge Functions for secure room state management

USrc   usrc.vercel.app
- Built a high-performance media platform using Next.js App Router and React Server Components, improving SSR and client hydration
- Implemented secure cross-origin browser communication using the HTML5 postMessage API to synchronize state with external video player iframes
- Reduced API load using Next.js Data Cache with Incremental Static Regeneration (ISR), lowering external rate-limit usage

Bare Metal PaaS   github.com/UmutSen2662/bare-metal-paas
- Built a React observability dashboard with TanStack Query to visualize system telemetry and stream live process logs in real time
- Designed a self-hosted PaaS engine using FastAPI and Mise to manage isolated runtimes without containers
- Developed a dynamic reverse proxy controller that generates and deploys Caddy JSON configurations for automatic routing and SSL
- Implemented a file-based LockManager to prevent race conditions during concurrent builds and enable atomic Git webhook deployments

Technical Skills

- **Frontend:** React, Next.js, Svelte, TypeScript, Tailwind CSS, TanStack Query, WebRTC
- **Backend:** Node.js, Python (FastAPI, Flask), Supabase, PostgreSQL, Java Spring Boot, Socket.io