

Emre Şener

Hands-on Software Architect | AWS, Multi-tenant SaaS & Production Systems

Pendik / İstanbul, Turkey · +90 542 492 85 99 · emre@sener.net.tr · github.com/emressener

Hands-on software architect and engineer with 14 years of professional experience across AWS cost optimization, multi-tenant SaaS, high-volume messaging, and communications platforms. Work covers application development, cloud infrastructure, and production engineering on CloudFix, Kandy, Booking.com, and defence systems.

WORK EXPERIENCE

XO Crossover (Crossover for Work) — Chief Software Architect Nov 2020 – Present
Remote. Product assignments included concurrent work across Trilogy products: CloudFix continued through Dec 2025 after Kandy began in Dec 2024; 2024 also included short rotations.

Kandy — cloud communications (UCaaS / CPaaS) · Dec 2024 - Present

- Built Kandy Notetaker in Python on AWS Lambda and CloudFormation: meeting transcription with Whisper and Amazon Transcribe, operator-portal and call-control (CIM) authentication, S3 audio handling, and production deployment (VPC/NAT, secrets, GitHub Actions).
- Production engineering for UAE and North America: incident investigation (call quality, routing, SSO), session-border-controller disaster-recovery backups, and operational runbooks. Fixed a WebSocket adapter timer memory leak and a notification-broker Hazelcast cache-refresh failure.
- Developed a Python analyzer for exported SIP/PSX (call-routing) traces to investigate routing failures, extra call legs, and complex call flows.
- Operator portal (PHP, MySQL): Azure SSO for the Acrobats mobile client, small-business customer onboarding and configuration copy, Notetaker settings, and historical order archival.

CloudFix — AWS FinOps SaaS · Apr 2022 - Dec 2025

- Implemented multi-tenant SaaS capabilities covering Cognito/OIDC SSO, tenant isolation, master-tenant APIs, and customer onboarding from AWS Organizations using CloudFormation StackSets.
- Developed Finder/Fixer automations that detect AWS cost opportunities and apply remediations through Systems Manager Change Manager — rightsizing, Lambda Graviton and runtime upgrades, log retention, and unused-resource cleanup across services including Lambda, MSK, RDS, and OpenSearch Serverless. Added safety validators so recommendations are skipped when already fixed or no longer applicable, with AWS CUR/Athena as the cost source.
- Hands-on from the 2022 SST/AWS platform rewrite through 2025 (TypeScript, Lambda, API Gateway), including savings dashboards and OpenAPI definitions.

AWS Cost Optimizer, DevFlows, and XO RemoteU · Nov 2020 - Apr 2022

- Built Cost Optimizer UI v2 and DevFlows invocables (Java/Quarkus AWS utilities and TypeScript workflow actions), including EFS lifecycle finders and GitHub Actions CI — the platform CloudFix grew from.
- Automated XO RemoteU candidate onboard/offboard and ITOps ticket workflows with Python Lambdas.

Product rotations · Apr 2024 - Jul 2024 (concurrent with CloudFix)

- AdvocateHub: staged Discourse 3 rollout (Ruby on Rails, nginx/gitops). Lithium/NewNet: phishing-URL analysis tooling and release pipelines.

Milsoft Yazılım Teknolojileri — Senior Software Engineer

May 2020 – Nov 2020

İstanbul · Defence / C4I

- OARIS data adaptation and hardware simulation for C4I systems.

Booking.com B.V. — Developer

May 2017 – May 2020

Amsterdam · Hotel-guest messaging

- Implemented open/click tracking and service-health monitoring with PagerDuty alerts for a hotel-guest messaging platform handling approximately three million emails per day.
- Designed and implemented a Kubernetes-based message scheduling service that triggered approximately 500,000 reservation, check-in, and check-out messages per day, and allowed other services to schedule future REST calls by adding pods.
- Applied ML to auto-reply guest messages, and built Oozie/Hadoop workflows to join guest reviews with other tables.

Milsoft Yazılım Teknolojileri — Software Engineer

Sep 2012 – Apr 2017

Ankara / İstanbul · Combat Management System HMI

- Java HMI for the combat management system: requirements, design, implementation, and unit tests. Built and configured 100+ Maven modules for continuous integration; pub-sub messaging middleware for distributed computing.

SKILLS

Languages	TypeScript, Python, Java, PHP, JavaScript, SQL, Ruby, Bash
Cloud / infra	AWS (Lambda, CDK/SST, CloudFormation, Cognito, Athena, CUR, SSM, S3, API Gateway, Organizations/StackSets), Kubernetes, Docker, GitHub Actions
Focus	Multi-tenant SaaS, FinOps automation, production incident engineering, system design, CI/CD

EDUCATION

Middle East Technical University — M.Sc. Computer Engineering, 3.43/4.00

Mar 2013 – Aug 2016 · Thesis: Utilizing query performance predictors for early termination in meta-search

İ.D. Bilkent University — B.Sc. Computer Science, 3.67/4.00

Sep 2008 – Jun 2012

LANGUAGES

Turkish (native) · English (professional)