

Berk Durmus

Istanbul, Turkey · hello@berkdurmus.com · berkdurmus.com · github.com/berkdurmus

EXPERIENCE

Center Health — Remote, US

Senior Product Engineer · Oct 2022 – Present

- Helped the company to scale from 2k to 30k patients by building engaging features and architecting scalable solutions. Deploying it everyday.
- Built AI-powered clinic agents that automated 60% of routine workflows, reducing clinical operations time from hours to minutes across 50+ U.S. clinics.
- Created Center Health's LLM Agents, responsible for LLM Observability with Langchain & Langsmith. RAG for medical context, build clinical and in-team AI driven workflows. Build TDD + AI (Test Driven Generation) and company's Spec Driven Development standards. Implemented model evaluation frameworks, and prompt optimization systems.
- Developed Structured Self-Evolving LLM Memory system handling 500,000+ patient conversations with 90% accuracy retention - enabling consistent chat context without losing critical medical facts.
- Architected EHR automations and human-in-the-loop healthcare systems.
- Implemented data pipelines to process and aggregate data from sources like Apple Health, Google Fit, Libre and Dexcom. Build outcomes analysis agent to validate patient clinic outcomes based on those data. Analysis shows 80+% positive outcomes for all patients.
- Implemented an LLM-driven notification system that sent personalized health suggestions and ideas to patients based on their glucose readings and behavior, also LLM decides time to send the notification based on patients' engagement patterns, and context.
- Implemented and responsible for E2E Playwright + Checkly Test suites for multiple patient & provider apps. Bugs reaching production dropped by half. Responsible for the whole CI/CD flow.
- Created and contributed to multiple APIs at Center Health, seamlessly integrating data from various sources (blood glucose, sleep, blood pressure, exercise) into internal systems, ensuring that patient data flows efficiently through the platform experience.
- Established comprehensive testing framework: unit, integration, and E2E tests with 95% code coverage.
- Implemented Posthog and participated in pricing experimentations and performed many A/B tests.
- Created the Signup funnel, Signup Paywall and monitoring it frequently. Which results in a 15% increase in MRR.

Pulfy.com — Turkey

Co-founder & CTO · Mar 2021 – Oct 2022

- Implemented an automated pipeline to gather data on over 10,000 destinations, including events, festivals, hotel prices, visa information, restrictions, weather, flight costs, optimal travel times, and activities, enhancing the functionality of a robust travel recommendation engine. Users could find personalized travel suggestions in under 200ms.
- Led the deployment of web, iOS, and Android applications, ensuring a seamless user experience across platforms, leveraging the Ionic framework for efficient cross-platform development.

Turing — Remote, US and EU

Software Engineer · Jul 2019 – Jan 2021

- Provided comprehensive full-stack development, strategic stack planning, and product analytics implementation for EU & US clients.
- Engineered robust data solutions encompassing data bindings, data streaming, notification services, internationalization, and migration to support scalable and efficient product operations.
- Developed innovative tools such as data crawlers, IP-rotators, keyword analyzers, non-copyrighted image selection tools, image optimization tools, and caching strategies to enhance product functionality and user experience.

PROJECTS

Openmation — AI-driven Test Recording + Monitoring tool

openmation.dev · github.com/openmation/openmation

- Fully open source AI driven test generation and recording tool, replays them with AI-assisted element matching, and generates shareable links, and supports CRONs on Browser.
- Also supports scheduled runs for synthetic monitoring. TypeScript, Chrome APIs, LLM integration

Clinical GuardRail

github.com/berkdurmus/clinical-guardrail

- A comprehensive safety layer that wraps around any AI model to ensure medical recommendations are safe, evidence-based, and compliant with healthcare regulations.

EPS FHIR MCP Server

github.com/berkdurmus/eps-mcp

- A Model Context Protocol (MCP) server for the NHS Electronic Prescription Service (EPS) FHIR API. This server provides tools, resources, and prompts for interacting with electronic prescriptions, enabling seamless integration with LLM applications.

HealthAgentKit — TypeScript framework for healthcare reinforcement learning agents - simulating clinical workflows, triage, and care pathways

github.com/berkdurmus/healthAgentKit

- Health Agent Kit is a comprehensive TypeScript framework designed to simulate and evaluate reinforcement learning agents in healthcare scenarios. It provides tools for creating clinical environments, implementing agent policies, and analyzing healthcare workflow optimization.

Clinical FIRE — Fast Interoperable Rules Engine for Healthcare Workflows

github.com/berkdurmus/clinicalfire/

- TypeScript-based workflow automation platform designed specifically for healthcare environments. It provides a powerful rules engine that enables healthcare organizations to automate clinical workflows, improve patient care coordination, and reduce manual processes.

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TraceStation — Playwright Debug Agent

github.com/berkdurmus/trace-station

- TraceStation (Not by Sony) is an AI-powered debugging assistant for Playwright tests that analyzes test failures and provides actionable recommendations.

SKILLS

TypeScript, React, Node.js, Express, REST, GraphQL, PostgreSQL, Redis, MongoDB, Claude Code, Cursor, LLM agents, RAG, embeddings, prompt engineering, LangChain, Playwright, AWS, Docker, Github Actions

EDUCATION

Bilkent University — MS, Computer Science 2017–2019

Bilkent University — BS, Electrical & Electronics Engineering 2013–2017