PETER M. KEMPER

Senior Full-Stack Software Engineer | Manager, Software Engineering

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SUMMARY

Hands-on engineering leader with end-to-end technology ownership at MedTech Innovator, reporting directly to the CEO while leading four engineers and continuing to architect and ship production software across web, mobile, backend, cloud infrastructure, payments, security, and AI automation. Specializes in turning complex operational problems into reliable software, eliminating manual work, and delivering under aggressive deadlines. Brings deep ownership across the full product lifecycle, from architecture and UX through implementation, infrastructure, deployment, incident response, and optimization.

TECHNICAL SKILLS

Core: TypeScript, JavaScript, C#, SQL, Next.js, React, React Native/Expo, Angular, NestJS, Node.js, Tailwind CSS, AG Grid
Data & Cloud: MySQL, PostgreSQL, Prisma, TypeORM, Redis, OpenSearch, AWS (EC2, RDS, S3, SES, SQS, CloudWatch), Vercel, Docker, Terraform, GitHub Actions
AI & Integrations: MCP servers, OpenAI APIs, AI matching/scoring and automation, Stripe, Auth0/Auth.js, Stream Chat, HubSpot, Airtable, PitchBook, Slack, Twilio, Google APIs

PROFESSIONAL EXPERIENCE

MedTech Innovator — Manager, Software Engineering

Jul 2025 – Present | Software Engineer, Dec 2023 – Jul 2025 | Remote

- Own day-to-day technology execution, reporting directly to the CEO with full accountability for engineering delivery. Lead a four-engineer team, set technical priorities, handle or delegate organization-wide technology requests, and remain deeply hands-on across architecture, Next.js/React, NestJS/MySQL, React Native, AWS/Vercel, DevOps, security, and AI automation.
- Shipped Innovator Connect from an inherited prototype to production on iOS and Android in ~6 weeks, independently driving the React Native/Expo client and NestJS API with authentication, real-time messaging, push notifications, calendar integration, offline-first caching, and an EAS OTA pipeline; grew adoption to 430+ registered devices and 3,300+ scheduled meetings.
- Founded the company's Next.js portal from its first commit and became its #1 all-time contributor, scaling it into a 60+ surface production platform across four accelerator programs supporting applications, diligence, reviewer operations, investor deal flow, mentorship, payments, analytics, communications, and events.
- Drove high-volume AI automation across core accelerator operations, building percentage-based fit matching that ranks applicant companies against reviewer expertise and program criteria across 1,000–10,000-record workflows, plus a polished curation UI for sorting and review.
- Built an AI-assisted feedback pipeline that synthesized reviewer comments, scoring, and constructive criticism into clean personalized communications for thousands of rejected applicants, replacing a labor-intensive manual process and saving hundreds of staff hours; also developed internal MCP tooling and other automation to improve team efficiency.
- Re-architected production systems under real-world scale, including replacing a crashing 286 MB synchronous administrative workload with an instant-loading background-generated compressed snapshot, eliminating analytics memory failures, introducing Redis caching, and strengthening background-job infrastructure.
- Own high-stakes incident response across payments, security, and infrastructure; discovered and eliminated a Stripe double-charge condition affecting $33,750 across nine companies, closed legacy authorization vulnerabilities, restored disrupted email operations, and hardened AWS/email access controls.

Trovata.io — Software Engineer II

Apr 2022 – Oct 2023 | San Diego, CA

- Built global payment functionality using Angular, Material, and Node.js supporting international currencies and wire formats; delivered security-sensitive workflows including MFA, payment approvals, forecasting UX, notifications, and reusable components aligned to Figma specifications.
- Strengthened critical payment workflows by authoring Cypress end-to-end tests and contributing to CI coverage.

Calpine Energy Solutions — Software Engineer

Jan 2020 – Apr 2022 | San Diego, CA

- Built a full-stack Retail Energy Bidding Application using Angular, AG Grid, and Node.js with C#/SQL services, stored procedures, and REST APIs, enabling forecasting teams to manage, validate, and submit megawatt-hour bids.
- Automated daily institutional payment-file processing by developing reusable NuGet packages and parsers used by Azure Functions and Logic Apps, normalizing disparate financial formats into standardized JSON.
- Led an end-to-end company website redesign in partnership with a UX designer and VP of Marketing, implementing the production experience with HTML/CSS/JavaScript and Bootstrap.

Pathway Innovations and Technologies (HoverCam) — Software Engineer

Apr 2019 – Dec 2019 | San Diego, CA

- Built FusionChat, a real-time classroom messaging module using Angular, Socket.io, Express.js, and MongoDB.

INDEPENDENT SOFTWARE PRODUCTS

Founder & Sole Engineer — independently conceive, architect, build, deploy, and operate each production product, owning product strategy, UX, full-stack development, infrastructure, and ongoing iteration.

Homeschool of the Future | homeschoolofthefuture.com
Full-stack web/mobile educational platform in an npm-workspaces monorepo with shared curriculum packages, multi-provider authentication, AWS-backed infrastructure, OTA mobile updates, and a content-hashed ElevenLabs voice pipeline that pre-generates only changed speech assets. *Stack: Next.js 15, React 19, Expo/React Native, TypeScript, Tailwind 4, PostgreSQL 16/RDS, Prisma, Auth.js, AWS SES, Terraform, Vercel*

Scripture Atlas | scriptureatlas.com
Interactive biblical data and visualization platform with graph-based genealogies, interactive maps, typed datasets, prerendered content, share-card generation, and plan-then-apply data cleaning/deduplication tooling. *Stack: Next.js 16, React 19, TypeScript, Turborepo, Tailwind 4, React Flow, Dagre, Leaflet, PostgreSQL/Prisma, Vercel*

Kingdom of Heaven Threads | kingdomofheaventhreads.com
Production e-commerce platform with signature-verified payment and fulfillment webhooks, idempotent refund handling, bounded-concurrency integrations, admin tooling, analytics, and print-on-demand fulfillment. *Stack: Next.js 16, React 19, TypeScript, Tailwind 4, Stripe, Printful, Vercel Blob, Resend, GA4, Meta Pixel*

LifeHack Toolbox | lifehacktoolbox.com
Privacy-focused collection of ~48 browser-based utilities, including local OCR, PDF editing/signing, document generation, visualization, calculators, and Web Audio tools; user documents are processed client-side without a backend. *Stack: Next.js 14, React 18, TypeScript, Tailwind 3, Tesseract.js, PDF.js/pdf-lib, Web Audio, Recharts, Vercel*

EDUCATION

California State University San Marcos — B.S. Computer Science, 2019 | San Marcos, CA