

Emmanouil Pappas

Senior Software Engineer

London, UK · +(44) 7397 008340 · hello@epappas.dev · epappas.dev · github.com/mpappas · linkedin.com/in/manospappas

Professional Summary

Senior back-end engineer (Node.js/TypeScript) with 10+ years building high-scale platforms: real-time communications APIs at Vonage, then card-issuing and payments in regulated fintech at Equals Money. Owns systems end to end, from authorization models and issuer migrations to production incident response. Early adopter of agentic engineering: 90%+ AI-assisted delivery on Claude Code, contributing coding rules and Claude Code skills used across the engineering organisation.

Skills

AI: Agentic engineering, Claude Code, Claude skills, MCP, Cursor, Codex, Gemini

Languages: JavaScript (ES2020), TypeScript, Python, Bash

Back-end: NodeJS, Express, GraphQL/Apollo, CI/CD, Microservices, NoSQL

Front-end: NextJS, React, Redux, Tailwind

Testing: Jest, Pytest, BDD (Gherkin, Cucumber)

Monitoring: ELK Stack, Grafana

Infrastructure: Docker, Terraform, nginx, AWS (Lambda, API Gateway, S3, CloudFront, IAM, DynamoDB, RDS, Route53, CloudWatch)

Work Experience

Senior NodeJS Back-end Developer — Equals Money

London, UK · Apr 2022 – Present

- Practised agentic engineering at 90%+ of team delivery since Feb 2026 on Claude Code (the company's licensed primary tool), shipping regulated card-issuing and payments features under full test and release-approval compliance
- Contributed to the engineering organisation's shared standards for AI-assisted delivery, writing coding rules for front-end, service and serverless codebases plus Claude Code skills spanning test reporting, code-review monitoring, database access and log investigation
- Designed and built the platform's authorization layer over three years: an RBAC and balance-roles model whose central access-check is consumed by every microservice. Delivered permission evaluators plus the V1/V2 role-management API suite, later extending enforcement into white-label programme onboarding
- Integrated issuer processors including Marqeta and Thredd, owning card lifecycle APIs (issue, activate, suspend, replace, cancel), tokenised and non-tokenised card products at scale, and the migration of card programmes and payment tokens between processors
- Built the digital-wallet token lifecycle: Apple/Google/Samsung Pay provisioning controls, payment-token webhook ingestion (activate, suspend, expire), card-by-card token migration between processors
- Developed the 3DS push-notification approval flow for card transactions, strengthening SCA compliance and customer experience
- Owned production reliability across Cards, Budgets and authorization services: incident response on 3DS approval outages and card-activation failures, Mastercard Data Integrity compliance fixes, and production data-repair scripts
- Extended balance-role enforcement into white-label onboarding by wiring V1 and V2 role checks into the flow. Introduced attribute-scoped access so users act on their own resources or any, per permission, across people, cards, budgets and transactions endpoints. Ran production backfills aligning every persona's roles across accounts
- Delivered card-product discovery and multi-product support: V2 card-products APIs, product filters, schema changes across the Cards and customer-information services; US non-tokenised products for market expansion; V1 to V2 migrations across create, cancel, replace and transition endpoints including shared-card semantics; a "Suspend Everything" action covering cards and digital tokens
- Delivered the push-notification platform migration from Twilio to FCM: multi-token device model, token cleanup, service restructuring, and a Notification Preferences Center
- Built the Pay-by-Card integration: order properties, trade endpoint, saved-card CRUD with default-card handling; funds-request permission evaluation and cross-currency fixes
- Sustained contributions across 10 microservice repositories with Cypress E2E tests, platform documentation and internal talks on API testing and Balance Roles
- Mentored junior engineers; guided a six-month intern from onboarding to independent delivery
- Increased test coverage by writing unit, integration and E2E tests using Jest and Supertest

NodeJS Back-end Developer — Vonage (Nexmo)

London, UK · Dec 2016 – Mar 2022

- Worked with NodeJS, Python, Scala, Go and Groovy across projects
- Built Communication (REST) APIs for Voice and Video RTC
- Optimized infrastructure sizing and scaling by performing load tests to allow faster onboarding of new customers
- Helped the team meet high quality standards as one of the main contributors on the way to 99% coverage
- Created a suite of 50+ smoke tests covering multi-datacentre scenarios

- Worked on 5+ healthcheck pipelines with Jenkins covering smoke, E2E, stress and load tests using Python, Groovy, Pytest, SipP, Gatling, Gherkin and Cucumber
- Developed monitoring and alerting dashboards with metrics from over 2000 tests (E2E, regression, smoke, stress) using the ELK Stack and Grafana

Freelance Web Developer

Heraklion, Crete, Greece · Dec 2012 – Nov 2016

- Developed and supported high-load e-commerce websites (30k users daily) and web apps
- Implemented secure payment gateway integrations for a range of projects
- Integrated ERP and CRM systems with e-commerce platforms

Projects

Freelance and personal products, delivered end to end with agentic engineering (Claude Code)

Home Meal Plan: AI meal-planning SaaS (solo product) — homemealplan.com · 2026

- Designed and built a multi-tenant SaaS where households generate AI-drafted weekly meal plans with macro tracking, shared recipes fed by PDF and URL import, and aisle-grouped shopping lists, refined through a streaming, tool-using AI nutritionist that applies changes directly
- Next.js 15 App Router with Server Actions, React 19, TypeScript, Tailwind v4 design system, Supabase Postgres with row-level security, Clerk auth with verified webhooks, Anthropic API (structured generation, document extraction, streaming tool use), per-household AI rate limiting; v1 to private beta in about five weeks, 58 merged PRs
- Built with a self-designed agentic workflow: PRD-embedded Claude Code commands, persistent project memory, a custom skill library with a no-code-before-spec gate, and parallelisable task prompts

Sports Agency Management Dashboard (solo product) · 2026, in development

- Designed and built an invite-only, role-based dashboard and headless CMS replacing a hand-edited CSV as a European sports agency's source of truth; publishing a player updates the live public site through hardened, published-only database views
- Three security layers reading one JWT claim (Clerk restricted mode, server-action guards, deny-by-default row-level security); auditable CSV importer covering ~1,350 career entries; ops home page, drag-and-drop task board, ticketing with RLS-hidden internal notes, content-as-code knowledge base
- Delivered through 29 spec-driven Claude Code commands, one branch and PR each, with RLS simulations and build checks as acceptance criteria

Tangram Sports: website for an international basketball agency (client) · 2025

- Built the public site for a basketball agency with ~150 clients across 30+ leagues: filterable roster, player pages with career history, per-season stats and video highlights, light and dark theming (Next.js 16, React 19)
- Migrated the roster from a 9,000-line hand-maintained data file to a headless Supabase architecture read through published-only views with the anon key, preserving the visual design via an adapter layer; static generation with ISR plus secret-protected on-demand revalidation
- Reconciled the client's official roster spreadsheet through automated audit reports and a full photo-review pass, and led a page-by-page copy review with the client

Halkiadakis Cleans — halkiadakiscleans.gr (client) · 2026

- Rebuilt and redesigned the business site on Next.js 16 and React 19 with a custom design system, Greek-first SEO slugs and permanent redirects, migrating all content from the legacy WordPress site
- Replaced all contact forms with measurable phone and email lead paths tracked through cookie-free analytics behind a first-party proxy; wrote the Vercel and DNS launch runbook for a non-technical operator
- Ran as a spec-driven Claude Code build: 31 numbered branches with per-task specs and acceptance criteria, audit loops that caught fabricated data before it shipped, and disposable HTML mockups used to choose design directions with the client

Education

Master of Informatics Engineering

Dept. of Applied Informatics & Multimedia, TEI of Crete · Jun 2016

Bachelor of Informatics Engineering

Dept. of Applied Informatics & Multimedia, TEI of Crete · Sep 2012

Additional Experience & Training

Web Developer (charity volunteer) — Giatousallous.org

Athens, Greece · Aug 2020 – Dec 2020

- Built the organisation's web app from scratch with payment-gateway and CRM integration (AWS Lambda); still support its digital presence

Udacity & Udemy

- AWS Solutions Architect coursework; Full Stack Developer Nanodegree; Docker; GraphQL; NodeJS Advanced Concepts

Languages: Greek (native), English (advanced) · **Interests:** triathlon, marathons, basketball, cooking, jazz, books, travel