

Mihai Neagu

Senior Software Developer – backend systems, developer tools, and shipped products.

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• Summary

Senior Software Developer with six years of experience building backend systems, developer tooling, and shipped products across fintech, video-supply, and developer-platform domains. Specializes in correctness-, latency-, and operability-critical stacks using Rust, Go, TypeScript, and Python across AWS and Azure. Proven record of owning project lifecycles end-to-end, accelerating deployment workflows, and designing LLM and multi-agent automation. Recognized with an internal Citi award and hackathon placements for delivering first-of-their-kind systems.

• Skills

Languages

Rust Go TypeScript JavaScript Python

Frameworks & Libraries

Node.js React Next.js Preact Vite Lit
GraphQL Flask FastAPI

Cloud & Infrastructure

AWS Azure Kubernetes Serverless Lambda
Docker Cloudflare Vercel

Data

PostgreSQL SQLite MySQL MongoDB Neon
Databricks Lakebase

Tools & Practices

Tailwind MDX Storybook Playwright CI/CD
Git

Soft Skills

Technical writing Mentoring
Cross-team collaboration Problem solving

• Experience

Borealis – Senior Software Developer

May 2025 - Present

- Own the end-to-end lifecycle of ~15 npm packages and 200+ repositories – production services, working projects, and proofs of concept – from design through deployment and on-call support.
- Build Python backend APIs with Flask and FastAPI across 5-6 applications, implementing 50-100 endpoints deployed on Azure and Kubernetes.
- Develop data workflows on Databricks with Lakebase-backed storage, managing a ~70 GB data collection.
- Lead contractors across several projects with diverse partners, defining their tasks and setting the engineering direction.
- Introduce CI/CD and process improvements that cut pipeline duration by 30-50% on several projects and strengthen cross-team collaboration.

Ateliere Creative Technologies – Back End Developer

Mar 2023 - May 2025

- Built a workflow-execution engine on AWS Serverless (Step Functions, Lambda, GraphQL, React) for a video supply-and-distribution platform.
- Delivered updates to custom plugins powering distribution workflows.
- Designed LLM automation pipelines with LangChain and a multi-agent orchestrator that scaled to each client's task volume, increasing automation coverage and scalability.

Mobizcorp – Full Stack Developer

May 2024 - Jan 2025

- Built a product-recommendation wizard for Brooks Sports that mapped questionnaire answers to best-fit products via a Salesforce-backed ML scoring model (Node.js, React, Drizzle ORM, PostgreSQL).
- Onboarded 2 engineers and authored technical documentation, supporting the team across development and QA.

CAPEX.com – Full Stack Engineer

Feb 2022 - Jan 2023

- Migrated the primary marketing website from PHP to Next.js for a financial broker holding 13 financial licenses across 50+ countries.
- Built marketing sites and an internal CMS that shipped 50,000+ articles, using React/Next.js, Strapi, Storybook, Cloudflare, and MySQL.
- Collaborated with the Team Lead and supported two developers across the frontend and backend.

Cult of Coders – Full Stack Engineer

Jul 2021 - Jan 2022

- Delivered backend and frontend features for two business clients, including Shopify and a maritime-transport company, using TypeScript, React, Meteor.js, Express.js, MongoDB, and Algolia.

Fintech0S – Full Stack Engineer

Dec 2019 – Jun 2021

- Built custom full-stack insurance workflows on the Fintech0S platform for BRD's insurance division and NN, spanning complex procedures, APIs, and client/internal applications (Azure SQL, JavaScript).

Loxon Solutions – Programming Analyst

Jan 2019 – Jul 2019

- Developed a standalone web-application product in Oracle APEX, Oracle SQL, and Python in collaboration with a Hungary-based team.

Citi – Summer Internship

Jul 2018 – Sep 2018

- Built a VBA/Excel MVP establishing the first multi-client repository for EMEA under the Direct Custody and Clearing Head, earning an internal award for the design.

UniCredit Bank Romania – Assistant Relationship Manager Intern

Nov 2017 – Jun 2018

- Supported sales, finance, payments, treasury, and corporate-banking operations, resolving client issues across the relationship-management desk.

• Education

Titu Maiorescu University

Master's degree · Cybersecurity & Network Security (SSIRI) · Oct 2024 – Jul 2026

Thesis:

Web Application Intrusion Monitoring and Detection (IDS/IPS)

– a Machine Learning-based IDS integrated with Node.js and the ELK Stack.

Academia de Studii Economice din București

Bachelor's degree · Finance & Capital Markets · 2016 – 2019

Thesis:

Algorithmic Trading using Genetic Algorithms

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• Certifications

[+] AWS Certified Developer – Associate

[+] AWS Certified Solutions Architect – Associate

[+] Microsoft DP-100 – Designing and Implementing a Data Science Solution in Azure (2021)

[+] Building Web Applications With React: Expert

[+] Foundation of Ethical Hacking

[+] JavaScript ES6

• Featured

basesquare

Rust, axum, SQLite, Databricks · 2026

A Databricks-to-SQLite sync engine and sidecar API server. Basesquare keeps a local SQLite copy of Unity Catalog tables for sub-millisecond reads, then propagates application writes back to Databricks via the SQL Statement REST API. HTTP sidecar (not a CLI library) – applications talk to it over REST. Embedded HTMX web console at /console.

Bee – Ask your documents

Vite, LLM, RAG · 2026

Document Q&A over your own files. Upload, index, and ask questions – answers come back with inline citations to the source passage so you can verify before trusting. Built as a focused RAG product rather than a general chat wrapper.

Flint UI

LitElement, TypeScript, Storybook · 2026

A library of 70+ UI components built with LitElement and TypeScript – published as @getufy/flint-ui with optional React bindings. Framework-agnostic primitives across inputs, data display, feedback, surfaces, navigation, and layout. Theming via CSS custom properties, Storybook showcase, type declarations out of the box.

Knight Runner

Vite, Preact · 2026

A mouse- and tap-driven knight loose on the board. Lasers sweep across the squares, tiles vanish underfoot, and multiple modes change the rules around you – built as a small Preact + Vite arcade take on chess movement, all about reaction and feel rather than strategy.

• Projects (13)

Belisarius

Rust, SCIP, fastembed, tantivy, MCP · 2026

A code-intelligence engine that walks a repo, indexes its symbols, and computes structural quality metrics – exposed natively as an MCP server for agents. Hybrid semantic (fastembed) + BM25 (tantivy) search fused via Reciprocal Rank Fusion, SCIP symbol graphs across Rust / TS / Python / Go (callers, callees, impact, flow), AST-level complexity, and a Preact web UI with Cytoscape graphs, treemap, DSM, and hotspots. Single Rust binary, no Docker.

Better

Preact, Go, Neon Postgres · 2026

A self-improvement app built around one idea: a tiny habit, anchored to an existing routine, checked in daily, with a streak that forgives the occasional miss. One-tap check-ins, streaks with grace, to-dos, a daily AI insight, and a Fresh Start reset – all offline-first as an installable PWA. Vite + Preact frontend, Go serverless functions on Vercel, Neon (serverless Postgres) pooled at runtime.

dausah – chess + zombie mode

Vite, Preact, Go · 2026

A chess game with a twist. Play standard chess, or flip into zombie mode where the rules bend – pieces behave differently and the board becomes a game of survival rather than position. Built as an interactive take on chess, not a tournament tool.

Collaborate VM

Go, React 19, Docker, WebSocket · 2026

A collaborative AI coding workspace that runs sandboxed dev environments in Docker containers. Users get a browser-based IDE – terminal, file editor, live preview, and a built-in AI agent (Goose) – without installing anything locally. Go + chi backend with WebSocket terminal I/O, React 19 / Monaco / xterm frontend, subdomain-routed preview proxy. Pre-1.0.

daupetrecere

Preact, Go, Neon Postgres · 2026

Bilingual (Romanian-default, English-secondary) invitation app for weddings, baptisms, and anniversaries. Hosts sign up, build themed invitations, manage a guest list, and share a public link; guests RSVP without creating an account. Preact + Vite SPA on Vercel, Go serverless functions for the API, Neon Postgres with Neon Auth.

Dither

Vite, WebGL2, Canvas2D · 2026

Real-time image and video dithering with a WebGL2 fragment-shader pipeline and a byte-faithful Canvas2D CPU fallback. The GPU path chains sample, chromatic aberration, blur, tone, glow, dither, nearest-neighbour upscale, post-FX, tint, and scanlines through low-res FBO passes; error-diffusion dithers (Floyd-Steinberg, Atkinson, Jarvis) stay on the CPU to remain pixel-identical to the reference. Built as an ES-module app with Vite.

This site

Vite, Vanilla JS, Markdown · 2026

The portfolio you're reading. Vite + ~80 lines of vanilla JS; each project entry is a markdown file in content/projects/, discovered via Vite's import.meta.glob at build time. Deliberately no framework – adding a project is dropping a .md and pushing.

Miorita – Postgres in the browser

Next.js 16, React 19, pg · 2026

A privacy-first Postgres client that runs in your browser. Paste a connection string, browse schemas, run SQL, visualize relationships, watch database health – no account, no telemetry, no server-side query history. The connection string lives only in sessionStorage and is sent server-side only when a query runs; TLS is strict by default with sslmode=no-verify as an explicit escape hatch. Next.js 16 App Router + React 19 + pg on Vercel Fluid Compute, 15-second statement timeout, 200-row result cap.

Photo FX

JavaScript, PixiJS, WebGL · 2026

A fully static, client-side WebGL photo app – upload a photo and a bold, social-ready look is applied instantly on the GPU. Every effect, render, and export runs in the browser via PixiJS, with no backend. Tap to reshuffle a fresh look, download a PNG, or record a 5-second mp4 reel of rolling looks (with a webm fallback).

Registru de Casă

Preact, Go, Neon Postgres · 2026

A cash-register / petty-cash app for Romanian SMBs – cafés, restaurants, and shops. Multi-location, multi-shift, with closed-shift immutability and reconciliation against Glovo / Tazz / bank payouts. Money modelled as numeric(12,2) end-to-end (no floats on the money path), every query tenant-scoped by org_id. Preact + Vite frontend, Go API + Neon Postgres on Vercel, Playwright e2e suite.

SiteForge

Static HTML, Supabase, Design tokens · 2026

A no-code builder that generates **single-file HTML sites** with a built-in design system. Pick a theme, drop in pages and blog posts, hit publish – output is a portable `index.html` plus a `/blog/` directory you can host anywhere. No build step, no framework, no runtime – every page is plain HTML with inline CSS using a `--sf-*` token palette.

vreaupdf

Preact, TypeScript, pdf-lib · 2026

Drop images into the browser, group them into one or more PDFs, hit submit, download. 100% client-side via pdf-lib – images never leave your tab. Per-image page orientation (Auto / Portrait / Landscape), five compression presets (Off → Maximum, default Medium, ~70-80% savings on phone photos), multi-select with drag-to-PDF on desktop, long-press selection on mobile, single responsive build.

YourChef

Preact, Go, Neon Postgres · 2026

A personal recipe library with weekly meal planning, auto-generated shopping lists, and a pantry. AI-assisted recipe parsing (Claude) and a daily price-scrape cron that keeps shopping costs current. Preact + Vite frontend, Go serverless API on Vercel, Neon Postgres with Neon Auth.

• Selected Engagements

SoNexy – Security Volunteer

Proxyman, Penetration Testing · 2024

Volunteered as a bug and penetration tester evaluating the security and functionality of the SoNexy application. Built automated testing scripts integrated with Proxyman to run comprehensive tests, identifying and addressing vulnerabilities and bugs – including bypassing the authentication system.

Flow Delivery

Flutter, Google Cloud, Firebase, Next.js · 2022

Marketing and mobile applications for Flow, a food-delivery client – distinct apps tailored for restaurants, drivers, and end users. Built with Flutter, Google Cloud, Firebase, and Next.js, serving ~15 drivers and 1,000+ registered users.

Invoice Parser

React, AWS · 2021

An automated document parser for small and medium-sized businesses, with a specialized module for handling invoices and documents. Built with React on AWS infrastructure.

• Achievements

[+] Future Work – 3rd place hackathon: Voice Analysis Sentiment as a Call Center Solution (2022)

[+] Citi – Award for building and designing the first customer repository on EMEA, built in VBA (2018)

[+] 1st place – OFSAA for Beginners 2.0 (December 2018)

[+] 2nd prize – Session of Student Scientific Research, on Algorithmic Trading (2019)

[+] 1st place – National Chess Championship, Under 16 (2013)

[+] 2nd place – National Olympiad of School Sports (ONSS), Chess