PETR VALÍK

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.NET Backend & Full-Stack Developer

PROFILE

Software developer with an **active NATO SECRET and Czech Republic SECRET clearance** and 2.5 years of experience, two of them building **operational software for the defence sector** at DELINFO. Full stack in **ASP.NET Core**, Blazor and React / TypeScript, with unit and integration testing and code review as part of normal delivery. Technical English at working level, including SRS and SDD documentation and presentations to international partners. Available immediately — remote, or hybrid around Olomouc, Ostrava or Brno.

EXPERIENCE

06/2026 – 09/2026
full time

.NET Developer — **Papirfly Research s.r.o., Brno**

Backend development on a multi-tenant marketing platform running on AWS.

- New-standard service on **EKS**: clean architecture, CQRS, EF Core and PostgreSQL, alongside a legacy Lambda and DynamoDB stack being consolidated into it.
- Features and production defect fixes as peer-reviewed pull requests with unit tests.

03/2024 – 03/2026
full time

Software Engineer — **DELINFO spol. s r.o., Brno**

Operational software for the defence sector, developed in a closed environment.

- **Diagnostic systems for military vehicles (CV90, Tatra)**: extensible transport-agnostic core, ASP.NET Core ingestion, **WebSocket** feed with heartbeat supervision, four simultaneous camera streams.
- **Map-symbol plugin for a Battle Management System**: XML parsing, dynamic symbol tree, **KML** export.
- **Plans and Orders application for military staff**: ASP.NET Core on clean architecture with a **Blazor** (Radzen) frontend, formal state workflow.
- Two API generations for an external partner, SRS and SDD documentation from legacy reverse engineering, technical presentations in English.

07/2023 – 02/2024
full time

Deputy Director — **WALDATRANSPORT, s.r.o., Brno**

Temporarily led the family logistics company and its 33 employees through a critical period.

EDUCATION

2023 – 2027

Software Development — **Unicorn University, Prague**

Bachelor programme, part-time study alongside full-time work, in progress.

2020 – 2023

Programming and Application Development — **Masarykova univerzita, Brno**

Bachelor programme, not completed; studies continued at Unicorn University.

SKILLS

- **C# / .NET and ASP.NET Core** — .NET 8 to 10, Minimal APIs and MVC, EF Core, JWT and role-based authorisation, FluentValidation, OpenAPI contracts.
- **Architecture** — clean architecture, modular monolith, CQRS, vertical slice, transport-agnostic core design, ADRs, automated architecture tests.
- **Frontend** — TypeScript, React 19, React Query, Next.js, Tailwind CSS, shadcn/ui; Blazor with Radzen professionally.
- **Testing** — xUnit, NSubstitute, FluentAssertions, **Testcontainers**, Vitest, pytest; run in CI on every pull request.
- **Infrastructure and DevSecOps** — Docker, **GitHub Actions**, Bitbucket Pipelines, Caddy, Cloudflare, Tailscale, Authentik, restic; CodeQL, gitleaks, Trivy, Dependabot.
- **Cloud and databases** — AWS (EKS, Lambda, DynamoDB, SQS, S3), Hetzner Cloud; PostgreSQL, SQL Server, SQLite, Redis, MinIO/S3.
- **Real-time and geospatial** — WebSocket, API polling, multi-stream video, BMS map symbology, KML, CesiumJS, SGP4.
- **Other** — Python, C, Haskell, Java; Git, Jira, Linux, Agile and Scrum, SRS and SDD documentation.

PROJECTS

- **Multi-tenant SaaS platform** private repository
  Business websites, booking and admin tools from one system. Modular monolith in **.NET 10** using **vertical slice architecture**: 30 modules, over 300 slices, per-module EF Core context on PostgreSQL, outbox domain events, per-tenant query filters. Next.js 16 frontend, Expo mobile app, roughly 10,000 tests in CI.
- **Self-hosted homelab** private repository
  Three **Hetzner Cloud** servers running twenty containerised services as **infrastructure as code**. Caddy, Tailscale, Cloudflare and Authentik SSO; per-service GitHub Actions pipelines deploying over SSH through staging to production, with monitoring and off-site restic backups.
- **Toggl MCP server** private repository
  Hosted **MCP** server in **ASP.NET Core** letting an AI assistant back-fill time entries under a read, propose, confirm, write flow. Authentik **OAuth** with PKCE, per-user encrypted tokens, idempotent writes, and tests gating the deploy.
- **claude-kit** github.com/PetrValik/Claude-kit
  Open-source (MIT) plugin kit for AI-assisted development: a stack-agnostic core plus packs for clean architecture, vertical slice, frontend and self-hosted infrastructure, with reusable skills, agents, commands and enforcement hooks.
- **ExampleAPI** petrvalik.github.io/ExampleApi
  The same REST API implemented ten times behind one **OpenAPI** contract in .NET, Python and TypeScript, with a shared conformance suite verifying parity in CI and a k6 harness benchmarking architectural cost.
- **Orbital Ops** orbit.irminsul.uk
  Real-time operations console in **React 19**, TypeScript and **CesiumJS**, propagating over 12,000 orbital objects with **SGP4** in a Web Worker on a 3D globe, with pass prediction and live aircraft and vessel overlays.

LANGUAGES

Czech, native
English, B2 upper-intermediate
German, A1 **Spanish**, A1

SECURITY CLEARANCE

NATO, SECRET, active
Czech Republic, SECRET, active
Both issued by the Czech National Security Authority (NBÚ)