István Alexander **Kuklin**

DevOps Platform Engineer · Software Developer

+36 20 531 8787 | istvan@kuklin.hu | https://www.kuklin.hu | kuklinistvan | István Alexander Kuklin



CV Version: 2026-08-04 21:47:48 (UTC)

This copy was authored at 2026-08-04 21:47:48 (UTC) (32cd781), and built at 2026-08-04 21:47:54 (UTC).
Get the latest version of my CV from **cv.kuklin.hu**!

Platform & DevOps Engineer with 4+ years of full-stack software development and infrastructure ownership. Specializing in CI/CD automation, Kubernetes, IAM, and infrastructure-as-code.

Professional experience

Lead DevOps & Infrastructure Engineer — Budapest, Hungary

S+H Informatikai Kutató, Fejlesztő és Szolgáltató Zrt. — Feb 2025 - Present

- Sole DevOps & Infrastructure Ownership: Lead the end-to-end infrastructure transformation for a 16-person company as *the sole DevOps Engineer and System Administrator*.
- Automated Infrastructure at Scale: Automated virtual machine provisioning and lifecycle management using Ansible, *enabling seamless maintenance and updates for 20–30 VMs with minimal overhead*.
- Identity & Access Management (IAM): Unified user management across development staff by implementing a centralized IdP and MFA solution (Kanidm and Authelia), *eliminating user configuration drift and significantly reducing helpdesk ticket volume*.
  - Self-Hosted Collaboration: Deployed an in-house Matrix communications server integrated with the new IAM platform, *eliminating third-party messaging licensing costs*.
- Containerization & GitLab CI/CD: Lead transforming monolithic direct-VM deployments into containerized microservices. Standardized configurations across environments to eliminate custom builds, *slashing manual deployment times from 15–30 minutes down to a zero-touch, single click*.
  - Role-Based Pipeline Security: Designed custom Python security scripts within GitLab CI, restricting artifact builds and deployments to authorized users, allowing external contractors to utilize pipelines safely without operational risk.
  - Kubernetes Migration: Built a k3s Kubernetes cluster and migrating progressively containerized workloads, reducing overall VM footprint over time.
- Observability & Rapid Feedback Loops: Engineered a custom telemetry dashboard in Rust featuring an automated upgrade availability dashboard, enabling non-technical staff to deploy releases independently and shortening client feedback loops *from weeks to under 24 hours*.
- High Availability & Network Improvements: Designing and implementing end-to-end high availability across Kubernetes clusters, load balancer gateways, internal networks, and VPNs (In Progress).
- VPN Modernization & Cost Savings: Redesigned the corporate VPN architecture around IPv6 to resolve developer IP collisions. Replaced proprietary Cisco AnyConnect with OpenVPN, cutting licensing costs and decoupling network infrastructure from physical hardware.
  - Secured the VPN with MFA, reducing attack surface on our network.
- Targeted Software Development: Authored a reusable Go microservice integrating the DÁP (Hungarian government ID) protocol; engineered as a modular component now deployed in core applications and packaged it, ready for enterprise clients.

System relocation and restoration — Budapest, Hungary

Company undisclosed (NDA) — 2025 (ad-hoc)

- Relocated the hosting of a queue management system (QMS) with both an on-site and an online facing user interface, serving between 10 and 100 users daily.
- On a separate occasion, restored the same system from backup, and hardened it against a relevant threat actor. Helped my client collect forensics-related information for later investigation about the incident.

Back End Developer (single project) — Budapest, Hungary

Sirius Services Kft. — Mar 2024 - Feb 2025

- Architected backend infrastructure in C# / ASP.NET for a national electronic tolling distributor and successfully managed remote deployment onto client systems.

- Proactively designed and implemented an automated CI pipeline, *reducing iteration feedback loops from 5 minutes to a single click* to accelerate in-house development cycles.
- Spearheaded full-stack deployment on client Linux systems, prompting a strategic career transition to dedicated, high-challenge DevOps and infrastructure leadership roles.

Master Developer — Budapest, Hungary

Ericsson — Jan 2023 - Dec 2023

- High-Performance Messaging: Optimized throughput for a C++ microservice PoC, engineering a specialized, high-performance message bus as an alternative to Apache Kafka.
- Service Testability & Tooling: Developed a Java Spring Boot adapter microservice and authored team self-tests that simplified cluster-level troubleshooting, *reducing debugging time from days to hours*.
- Log Analytics Automation: Built custom Python debugging utilities to parse microservice logs, cutting standard debug sessions *from 30 minutes down to 5–10 minutes*.
- Engineering Leadership & Mentorship: Co-mentored five junior developers in software architecture and clean code principles.
  - Set up an internal training server for hands-on learning (Git, filesystems, networking), maintaining team morale and skill development during a 4–5 month project transition period while bypassing internal IT ordering delays.
- Knowledge Sharing: Led unit-level coding workshops focused on modularity, reusability, and Dependency Inversion, elevating team practices and increasing technical visibility to management.

Software Engineer — Budapest, Hungary

Graphisoft — Mar 2022 - Jan 2023

- Managed backend release processes for Archicad, contributing C++ updates, troubleshooting Jam-based declarative build systems, and maintaining GCP/Kubernetes cloud infrastructure.
- Developer Enablement: Authored comprehensive onboarding documentation and automated repetitive onboarding tasks using Python, *reducing new hire time-to-productivity from days to hours*.

Software Engineering Intern — Budapest, Hungary

Microsec Software Engineering & Consulting Ltd. — 2018 - Mar 2022 (Summer internship)

- Cross-Platform Porting: Ported the MicroSigner digital signature tool to Linux using C++ and Java; implemented a PKCS11 provider to emulate hardware tokens for remote HSM modules, transforming the application into a cross-platform solution (a primary product selling point).
- Version Control Migration: Guided engineering team through a seamless transition from Subversion (SVN) to Git.
- Containerization & Infrastructure Foundations: Created Docker container images for certain services.
- Learning: Establishing foundational Linux administration and networking expertise while completing academic studies.

Projects & hobbies

Key Container Project

Óbuda University — Jan 2021 – Dec 2021

- Inspired by software engineering work at Microsec Ltd., created a proof-of-concept to repurpose dated Android devices as sealed encryption key holders by emulating OpenPGP Smart Cards.
- Awarded the Section First Award at the Student's Scientific Associations Conference of Óbuda University for the technical execution of the project.
- Developed core competencies in databases, applied cryptography, and foundational computer science principles.

Anki Docker Image & Community Contributions

AnkiCommunity GitHub Organization — Jan 2020 – Dec 2020

- Engineered `kuklinistvan/anki-sync-server`, a custom Docker container image for self-hosted Anki SRS synchronization that achieved over 1 million downloads on Docker Hub.
- Got invited to the core AnkiCommunity GitHub organization following deployment success, where I architected and built the community's central landing page before a transition off the project.

Early computer network experiments - Roaming network profiles

Home network — Jan 2016 – Dec 2016

- Driven by early technical curiosity to build complex systems, designed and implemented a centralized user profile and authentication environment replicating enterprise-level roaming layouts at home building upon OpenLDAP, Kerberos and OpenAFS. Implemented SSO login and service access.
- Deployed open-source directory services on Ubuntu clients, later expanding infrastructure to accommodate Windows workstations via Active Directory emulation.
- Collaborated with high school faculty mentors to utilize the environment as a practical sandbox for mastering core networking, identity management, and Linux systems administration fundamentals.

Professional skills

Programming Languages	**Python**, C++, Rust, Go, Java, C#, JavaScript, TypeScript
Software & Infrastructure	**Docker**, Ansible, CI/CD: Jenkins, GitLab, **Linux (Debian, RHEL, SLES)**
Cloud services	Kubernetes, GCP

Further skills

Spoken Languages	**Hungarian (native)**, **English (fluent)**, German (intermediate)
Driving license	**B2**

Education

Óbuda University — Budapest, Hungary

Bachelor's degree in Computer Science Engineering — 2018 - 2022