

Peter Marki - Application Security Engineer

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Software engineer with 8 years building production web applications, transitioning into application security. Hands-on experience with threat modeling (STRIDE), vulnerability assessment and secure SDLC practices, documented in a [published case study](#) of end-to-end security assessment on a live system. Full motivation, background, and goals: petermarki.com.

Languages

Hungarian (Native), English (C1), German (C1)

Education

BSc in Computer Science (2017 – 2021) - University of Szeged

Skills

- Threat Modeling: STRIDE, OWASP Threat Dragon
- SAST/DAST/SCA: SemGrep, OpenGrep, VulnApi, Wapiti, OWASP Zap, Burp, Dependabot
- Secure development: authentication & authorization, OAuth 2.0, JWT, TLS/HTTPS, logging, rate limiting, OWASP Top 10, input validation, security headers
- Cryptography & PKI: hashing (argon2, bcrypt, SHA), symmetric/asymmetric encryption (AES, RSA), digital signatures, TLS/SSL, JWT signing and verification, PGP/GPG
- Languages: Go, Python, Java, JavaScript, TypeScript, C, C++
- Backend: REST APIs, OpenAPI, Spring Boot, Liferay
- Databases: PostgreSQL, MySQL, ClickHouse
- DevOps, Infrastructure & Platforms: Docker,, GitHub Actions, GitLab CI/CD, Render, VPS, Linux

Projects

Security Assessment of a live application

- [Published case study](#)
- Task: conducted security assessment end-to-end on a production system
- Subject: 5k SLOC Go backend, 3k SLOC Nuxt TS frontend, 40 user production system
- Tools: OWASP Threat Dragon, STRIDE, OWASP Top 10, SemGrep, OpenGrep, VulnApi, Wapiti, Dependabot
- Practices: threat modeling, SAST/DAST, SCA, secure remediation, CI/CD automation
- Metrics: identified and remediated 20+ issues across 7 key areas of focus, eliminated 150+ security warnings, integrated scans into CI/CD pipeline

Work experience

Full Stack Software Engineer at MedusaLink | Sept 2024 - Dec 2025

- Built the MVP end-to-end, owning the full software development lifecycle from requirements specification through deployment and operations.
- Implemented authentication method via OAuth 2.0, JWTs, server side sessions and API keys, as well as RBAC-based authorization.
- Integrated anti-bot protection via Cloudflare Turnstile.
- Configured and managed production infrastructure on **Render**, alongside hardened VPS-based test environments.
- Built and maintained a **CI/CD** pipeline with **GitHub Actions** for automated testing, builds, deployments and dependency scanning.

Full Stack Software Engineer at Radar Cybersecurity | Oct 2023 - May 2024

- Collaborated with the Platform Engineering team on stabilizing and evolving internal deployment infrastructure.
- Improved reliability of an in-house deployment platform enabling the in-house Operations, Detection and SOC teams, built with **Nomad**, **Consul**, **Vault**, **Go**, **PostgreSQL**, and **ClickHouse**.
- Delivered backend fixes and operational improvements that addressed recurring deployment issues and improved platform maintainability.
- Maintained **GitLab CI/CD pipelines**, supporting automated build, test, and deployment processes.
- Contributed to peer **code reviews**, improving quality, consistency, and long-term maintainability of platform services.

Backend Software Engineer at Sonrisa Technologies | Apr 2021 - Sept 2023

- Implemented complex **REST APIs** in a travel booking platform with **Java, Spring Boot, Liferay**, and **MySQL**, improving platform functionality and supporting critical travel workflows.
- Developed and maintained a **Python data pipeline** processing 1,000+ monthly bookings, providing customer behavior insights used for reporting and business analysis.
- Improved engineering quality through code reviews, technical discussions, and mentoring of junior colleagues via pair programming and knowledge sharing.

Software Engineer (part-time) at University of Szeged | Jan 2018 - Mar 2021

- Contributed to [JerryScript](#), [Escargot](#), and [IoT.js](#), improving JavaScript runtime support for memory-constrained embedded and IoT environments.
- Implemented ECMAScript language features and fixed engine-level bugs in C/C++, improving standards compliance, runtime correctness, and platform stability.
- Delivered an embedded camera integration using ArduCAM on an ESP8266 board running JerryScript, enabling an applied biological observation system for a research institute.