

Ilia Snezhkov

Senior Software Engineer — Backend & Platform · Application Security

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Software engineer with seven years of professional Python across backend and platform work — startups, high-traffic consumer products, regulated fintech and telecom — specialising in application security. Builds the platforms and automation that put security scanning, triage and remediation inside the CI/CD pipelines teams already use. Has built an application-security platform from scratch at two companies, leading the technical side of both.

Experience

Senior Software Engineer — MTS Web Services

Apr 2024 – Present · Russia · Remote

COMPANY-WIDE APPLICATION SECURITY PLATFORM

The technology arm of MTS, one of Russia's largest telecom groups — public cloud, data, AI and developer platforms for enterprise customers and for the group's own engineering organisation.

An internal DevSecOps platform that collects security data wherever code and workloads live — scanners in GitLab CI, image scanning in Kubernetes clusters, cloud inventory — and drives everything downstream from it: CI quality gates, auto-fix merge requests, and the security team's own back-office and analytics.

- Own the platform end to end: architecture, backend, data model, automated remediation, and both the security-team and developer-facing surfaces.
- Built for scale: thousands of repositories across dozens of engineering teams and clusters, tens of thousands of container images and releases analysed, and a dependency inventory of hundreds of thousands of components.
- Built CVE prioritisation over a knowledge base of published vulnerabilities enriched with exploitation signals (CISA KEV, public exploits, EPSS), so triage starts from what is actually being exploited rather than from raw scanner volume.
- Built CVE-exposure analysis: when a new vulnerability is disclosed, affected projects surface automatically and reach the security team as tracked work, without waiting on input from product teams.
- Integrated multiple classes of scanning (SCA/SBOM, SAST, secrets, IaC) into CI, combining open-source tools with in-house extensions and custom scanners.
- Introduced LLMs as an automated second opinion on scanner findings — cutting false positives and a large share of the team's manual triage load.
- Lead the technical side: architecture and implementation decisions are mine to make, within a direction agreed with engineering leadership.

PYTHON · FASTAPI · POSTGRESQL · KUBERNETES · DOCKER · GITLAB CI/CD · SEMGREP · TRIVY · SYFT · GITLEAKS · TYPESCRIPT

Senior Software Engineer — Raiffeisen Bank Russia

May 2022 – Apr 2024 · Russia · Remote

BANK-WIDE APPLICATION SECURITY PLATFORM

Russian subsidiary of Raiffeisen Bank International — retail and corporate banking in a heavily regulated environment.

Led the build of the platform from scratch: security scanning, triage and reporting embedded across the SDLC of a large, predominantly Java organisation under strict audit and compliance requirements.

- Security checks were built to fit the delivery flows teams already had, rather than requiring them to standardise their pipelines first.
- Built and maintained the platform's async Python microservices and contributed to its React/TypeScript frontend.
- Automated finding triage and reporting so results reached owning teams as actionable work rather than raw scanner output.
- Owned CI/CD and observability end to end — Kubernetes, GitLab pipelines, Grafana dashboards, error tracing.

PYTHON · FASTAPI · LITESTAR · ASYNCPG · POSTGRESQL · KUBERNETES · GITLAB CI/CD · REACT · GRAFANA

Senior Python Engineer — Master Delivery

Oct 2021 – May 2022 · Russia · Remote

Last-mile delivery provider carrying merchants' online orders through to delivery.

Backend microservices and shared internal libraries used across the company's engineering teams.

- Developed FastAPI microservices and reusable internal libraries adopted by other backend teams.
- Led refactoring and performance optimisation of existing services.

PYTHON · FASTAPI · POSTGRESQL · DOCKER

Senior Software Engineer — McDonald's Russia

Apr 2020 – Sep 2021 · Russia · Remote

MOBILE APP & WEBSITE BACKEND API

Backend for the McDonald's Russia mobile app and website, built under contract via ADV — around 15 million users, one of the country's highest-traffic consumer products.

A high-load API for the mobile app and the website — gRPC microservices behind a service mesh, event sourcing for state changes, and product features through to the payment integration. Peaks near 10,000 requests a second were absorbed by optimisation rather than by more hardware.

- Shipped product features end to end, including the payment integration.
- Optimised the services carrying the peak so the load was met on the existing cluster rather than by scaling the infrastructure.
- Introduced a service mesh and event sourcing into the platform architecture, improving service-to-service reliability and auditability of state changes.
- Built gRPC microservices and an internal integration-test framework used across the platform.

PYTHON · GRPC · POSTGRESQL · REDIS · RABBITMQ · DOCKER · KUBERNETES

Python Developer — SQUILLA

Jun 2019 – Apr 2020 · Krasnodar, Russia

Crypto-loans platform — a security-sensitive financial product allowing users to borrow against cryptocurrency collateral.

An API gateway fronting the platform's services, plus a real-time collector aggregating cryptocurrency quotes from multiple exchanges to price collateral.

- Built both services: the gateway unifying access to the backend, and the quotes collector feeding near real-time pricing into collateral valuation.
- Maintained the core Django services of the platform.

PYTHON · FASTAPI · CELERY · DJANGO · POSTGRESQL · REDIS

Contract backend engineering for international clients, delivered independently end to end. Included a flight-ticket meta-search service with distributed parsing and real-time result streaming, and a SaaS that prioritised test runs by predicting which commits were likely to introduce defects.

PYTHON · FLASK · SOCKET.IO · CELERY · PYTORCH · SCIKIT-LEARN · POSTGRESQL

Technical skills

LANGUAGES	Python (primary), SQL
BACKEND	FastAPI, Litestar, gRPC, asyncpg, Django, Flask
DATA	PostgreSQL, Redis, MongoDB, SQLite, RabbitMQ
INFRASTRUCTURE	Docker, Kubernetes, service mesh, event-driven architecture, microservices
CI/CD	GitLab CI/CD, pipeline automation, quality gates, Prometheus, Grafana, Sentry
SECURITY	Secure SDLC, DevSecOps, threat modelling (STRIDE), secure code review, OWASP Top 10, vulnerability management and triage
SECURITY TOOLING	SCA/SBOM, SAST, secrets detection, IaC scanning; Sengrep, Trivy, Syft, gitleaks, KICS
AI-ASSISTED DELIVERY	LLMs in development and security workflows — false-positive triage, automated remediation

Personal projects

Suji

Japanese learning platform for iPadOS, iOS and macOS. Native Swift 6 under strict concurrency across 40+ modules; offline-first local SQLite syncing to Supabase through an outbox queue. FSRS-5 spaced repetition, handwriting graded against KanjiVG with dynamic time warping, on-device and cloud AI, and a full teacher-and-student loop.

SWIFT 6 · SWIFTUI · GRDB/SQLITE · SUPABASE · PENCILKIT · METAL

Gokaku

Offline trainer for Japan's written driving-licence exams, iOS and Android. 774 true/false questions, each carrying a verbatim quote from the National Police Agency rulebook and machine-verified against that corpus; 208 official sign images; twelve languages; no account, no network, no data collected.

FLUTTER · DART · KOTLIN/ANDROID · PYTHON

Education

Southern Federal University (SFEDU)

Sep 2013 – Jun 2018 · Taganrog, Russia

Specialist Degree — 5-year programme, equivalent to Master's level — Information & Computer Systems Security

Teaching assistant, 2016–2018. Competitive CTF player — exploitation, reverse engineering.

Languages

English — C1 · Russian — Native · Japanese — Elementary