

Tim Koval

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EXPERIENCE

Rust SDK Engineer

UNEY

July 2024 – Present

Dubai, United Arab Emirates

- Developing a high-performance E2E encryption SDK based on MLS protocol for various use cases from mobile devices to embedded platforms
- Optimizing end-to-end encryption SDK to work with various hardware and operating systems in real-time scenarios (instant messaging, VoIP and streaming)
- Facilitating knowledge-sharing about resource-intensive operations on edge devices through streamlined low-level tech

Software Engineer (Rust/Python)

KoronaPay Europe Ltd

July 2022 – July 2024

Almaty, Kazakhstan

- Developed Anti-fraud analytics platform and services that are widely used by thousands of customers everyday as a part of an International Fintech Corporation's ecosystem
- Implemented 10+ internal analytics tools and libraries using a combination of Python and Rust for processing of complex ETL pipelines for hundreds of thousands of daily transactions data
- Advocated modern technologies and development tools along the company and it's developers. Participated in public events as a company's representative and tech speaker
- Setup and maintained no-ops pipelines for in-house infrastructure with Kubernetes for the analytics platform and it's tools to provide continuous features delivery

Python/Rust Software Engineer

Komplizierte Technologien, GmbH

December 2020 – May 2022

Remote

- Built a solution that uses GPU Parallel computing to optimize classic Decision Tree models performance that decreased cloud services costs 10+ times by reducing inference time 500+ times
- Developed automation web app for estate development company that made logistics clearer with 10% and 20% decrease of construction costs and time estimates respectively

Python/Rust Software Developer

UBIC Technologies Ltd.

February 2019 – November 2020

Remote

- Developed a data exchange platform for Fintech companies and Banks used to securely share ML decisions between multiple parties in real-time, handling 10000+ distributed requests
- Built a framework for secure computations in Rust that made data exchange 10+ times faster and integrated it with Python services
- Automated releases with Docker and Gitlab CI those allowed to schedule releases every week for rapid delivery of new features

Research and Development Engineer

Global Protection Almaty Ltd.

February 2017 – January 2019

Almaty, Kazakhstan

- Built a hardware platform (hub) to connect various security and CCTV systems to company's web platform that is being used by 100+ industrial and private partners every day
- Implemented a web platform to integrate multiple security devices into a joined ecosystem and control all the devices using automation scenarios

PROJECTS

Aquapoint | Python, FastAPI, InfluxDB, Grafana, Docker

March 2023 – Present

- An IoT platform and web application that joins 100+ water purifiers and collects their data to help users control their water consumption and allow providers to service the devices on time

NeuroDynamica | Robotics, Edge Devices, Knowledge

January 2021 – Present

- An open source organization building tools for edge devices, robotics and embedded systems and writing about them as my steps through Science, Research and Engineering Digital Garden style log

EDUCATION

University of London

London, United Kingdom

BSc, Computer Science (Physical Devices and the IoT)

TECHNICAL SKILLS

Languages: Rust, C/C++, Python, SQL, JavaScript, HTML/CSS

Frameworks & Technologies: OpenMLS, Tokio, Axum, Flask, AioHTTP, FastAPI, SQLite, Postgres

Developer Tools: Git, DevOps (NoOps, Kubernetes, Nginx, CI/CD etc.), Cloud Platforms (GCP, AWS), Visualization (Grafana, ELK etc.)

General: Edge Devices Computing, System Design, Technical Leadership, Team Management, Process Automation