Demchuk Nazar
Junior Rust Developer

SUMMARY

Software Engineer with expertise in backend development, blockchain technology, and big data, boasting a solid foundation in computer science from Ukrainian Catholic University. Holds a strong junior/middle experience level, with hands-on Rust, C++, and a gambit of modern technologies such as Solana, Axum, and Kafka. Proven track record of developing robust solutions for cryptocurrency swapping and NFT architecture, time-series data manipulation, and digital media copyright solutions. Notable achievements include contributions to open-source projects, and winning a national programming tournament. Fluent in advanced software engineering paradigms and well-versed in real-time streaming and machine learning library development.

TECHNICAL SKILLS

Main Technical Skills	Rust (1 yr.), C/C++/C# (1 yr.), Solana, Axum, Tokio
Programming Languages	Rust (1 yr.)
Java Libraries and Tools	Apache Velocity
Mobile Frameworks and Libraries	Axum
Rust Frameworks	Axum
C++ Libraries and Tools	C/C++/C# (1 yr.)
Databases & Management Systems / ORM	KDB
Cloud Platforms, Services & Computing	AWS
Operating Systems	Linux
BlockChain and Decentralized Software	Solana, Tokio
Virtualization, Containers and Orchestration	WebAssembly
Other Technical Skills	Backend, Clap, Fat-Free, Rayon, Serde

WORK EXPERIENCE

Rust Blockchain Developer, AI-assistant & Index-based NFT

Duration: 04/2024 – current
Summary: Built a backend for an AI-assistant for cryptocurrency swapping on the Solana blockchain and developed the architecture for a new index-based NFT.
Responsibilities: Backend development, architecture design, cryptocurrency swapping AI-assistant implementation, NFT architecture research and development
Technologies: Rust, axum, solana-sdk, tokio, GPT-4

Software Engineer, Time-series Vectorized Language & Logging Tool

Duration: 08/2023 – 04/2024
Summary: Maintained and extended a time-series vectorized language for quick data manipulation, developed a report management feature, and wrote an allocation-free logging tool for the stock market.
Responsibilities: Language maintenance, report management development, real-time allocation-free logging tool development
Technologies: Rust, rayon, KDB, backend, Allocation-free Java, Apache Velocity

Junior Rust/C++ Developer, Copyright Solutions & Social Media Tech-Stack

Duration: 06/2023 – 09/2023
Summary: Worked on various copyright solutions for digital media, built tech-stack for a social media app, designed databases, and set up server and database on AWS.
Responsibilities: Digital media copyright solution development, social media app tech-stack build, database design and normalization, AWS server and database setup
Technologies: C++, OpenSSL, Rust, backend, WebAssembly, PostgresQL

Contributor, textplots.rs

Summary: Contributed to an open-source project for plotting graphs and diagrams on embedded devices.
Responsibilities: Open-source project contribution, CLI tool development
Technologies: Rust

Developer, Joker

Summary: Developed a Docker alternative CLI tool, with a focus on containerization and virtual machine concepts.
Responsibilities: CLI tool development, containerization and virtual machine knowledge improvement, multi-component application isolation
Technologies: Rust, serde, clap, Linux

Project Lead, Axon

Summary: Designed and developed a concurrent machine learning library and implemented various optimizations and tools for enhanced performance.
Responsibilities: Library architecture design, team leadership, optimizer development, testing, GPipe parallelization implementation
Technologies: C++, libeigen, TBB

EDUCATION

- **Bachelor of Science in Computer Science**
  Relevant Coursework: Data Structures and Algorithms, Computer Architecture,

Operating Systems, Big Data, Cryptography, Artificial Intelligence, Calculus, Discrete Math, Probability & Statistics.
Expected May 2025

CERTIFICATION

- **Ukraine Rust Developer Bootcamp**
- **Ecosoft Tournament**
Won a Ukrainian national programming tournament with 'Best Startup idea of the year' honor.