# Dima Shkurski

Summary email: dima@shkur.ski

Software engineer with 16+ years of professional experience and consistent understanding of concepts: from low-level development / optimization to general software design principles. Strive for simple solutions delivered on time. Spent most of the career working remotely.

#### **Skills**

- C++, Rust
- x86 assembly, C
- · Python, JS
- · Windows, MacOS, Linux
- · applied compiler theory
- LLM-based architectures
- reverse engineering and low-level debugging
- application security

### **Experience**

[2023..] Founder @ Not Al Berlin, DE

- built the product from the ground up; went through several iterations over a few months: from quick prototypes on Python/ElectronJS to a production-ready architecture;

· working on semantic search on the edge (private data, local devices), using

LLM/sentence transformers;

[2019 .. 2023]

Software Engineer @ Logitech Newark, CA, US

- we designed a software system reliably serving customers from Fortune 100;
- owned the client-side backend for Logitech Tune (Windows/macOS desktop application); participate in decision making on API and system architecture, while being a point of contact for technical questions and communicating with the outside vendors / internal teams;
- worked on the design and implemented the key backend part to integrate computer vision algorithms with Logitech conferencing solutions (firmware/software).

[2021]

Software Engineer @ Synth (now Shuttle, YC S20) London, UK

- joined the company as a first employee; we were hacking fast and implementing ideas overnight:
- as a Rust engineer, owned multiple subprojects within data generation engine; • worked directly with the founding team and taken part in decision making on

engineering, market research and strategy.

[2017 .. 2019]

Software Engineer @ COMODO Odesa, UA

- written software deployed on 20M+ computers worldwide;
- · development of antiviral scan engine (malware unpacker, virtual machine, dynamic code translator);
- reverse engineering, design and implementation of a low-level system monitoring
- worked closely with the security team on detecting attempts to exploit security vulnerabilities;
- worked on a runtime unpacker of Windows executable modules.

[2014 .. 2016]

Independent Contractor, Freelancer

- dozens of projects at VWorker, Elance, Freelancer.com; mostly in system programming and security fields;
- algorithmic programming; participated in ACM/ICPC contests.

[2012.. 2014]

Software Engineer @ HeuLab Singapore

· development of a network traffic analysis / filtration system, including implementation of a WinSock/LSP proxifier; desined and implemented the entire client-side part of Parental Control System for Windows.

## **Technologies**

C++, C, Rust, Assembly, Python, JS, SQL;

Bash, PowerShell;

UML, Protobuf, FlatBuffers;

Qt, QML, Boost, ElectronJS, WinRT, WinUI, GTest (Google Test), Catch 2;

LLM, semantic search, embedding models, BM25, BERT; prompt engineering;

IDA Pro, x64Dbg, WinAPI, Wireshark, Windows UI Automation / Accessibility (UIA, MSAA);

USB, UVC, UART, SPI, BLE, Bluetooth, MQTT, IoT, embedded;

HTTP, WebSockets, REST, ICMP, SMTP, IMAP, TCP/IP, NAT, proxies;

ZeroMQ, gRPC;

Windows, macOS, Linux, ChromeOS.

## Other

Open work permit: Canada, Germany;

US visa: B1/B2; Fluent: English;

Native: Ukrainian.