Ivan Krechetov

🌐 https://ikr.li
🏠 CH-8404 Winterthur
✉ ikr "at" ikr.li

Summary

Highly experienced *full-stack* Senior Software Engineer / Tech Lead, presently proficient in:

- Scala, Clojure, Kotlin
- Rust and C++
- Functional Programming
- Domain-driven Design
- Actor Model for Reactive Programming
- Event Sourcing
- Algorithms and Data Structures

Proven ability to quickly onboard into new business domains, ready to assimilate and revitalize even seemingly unmaintainable legacy systems. Want to solve practical problems with well-crafted software that *actually works.*

Experience

04/2020–now SIX Digital Exchange (SDX), Zurich

SDX belongs to the SIX Group, the leading Financial Market Infrastructure (FMI) provider in Switzerland. Among other things, SIX operates the Swiss Stock Exchange. SDX leverages blockchain technology to innovate the FMI, building bridges from the established regulated environment into the space of Web3, smart contracts, and cryptocurrencies.

Role: **Senior Software Engineer.**

Contribute to the Central Securities Depository subsystem; integrate with SWIFT (ISO 20022/15022), enable sanction screening capabilities, maintain the core data service.

Re-implement relevant Corda API for a shorter development feedback loop.

Build a scalable event-sourced actor-based financial infrastructure applications platform (Functional Core / Imperative Shell, CQRS).

Implement an OpenAPI Spec client code generator.

Tech: Scala Akka Clojure GraphQL XTDB/Datalog Kotlin OpenShift/AKS Kubernetes Corda.

08/2018–03/2020 Digitalparking, Dietikon

The Swiss market leader for B2B and B2C car parking solutions. The company began decades ago by building mechanical parking meters and parking gate systems, and has since grown into a digital solutions provider.

Role: **Web Developer.**

Contribute to full-stack web applications development in the domain of on-/off-street car parking: *Parkingpay.ch* and other mobile & desktop apps. The system is used by 100K+ drivers weekly. It's also serving parking zone operators and controllers.

Gradually raise the compiler strictness for both the back-end and the front-end to the highest level, resolving hundreds of warnings.

Introduce new direct debit applications and automatic demand letters (physical) for missed payments.

Rework several customer use-cases in Settings and Payments.

Implement a partner application for Coop.

Tech: Kotlin Java jOOQ/PostgreSQL TypeScript React.

10/2006–07/2018 XIAG, Zurich/Winterthur

Custom software development company.

Role: **Tech Lead.**

End-to-end planning, implementation, and maintenance of custom software systems by an autonomous dev team. Most significant projects:

- *SwissHotels.com* + dozens of specialized partner sites
- *Trade.stc.ch* – b2b hotel booking
- *Ostjob.ch* with a few forks
- MS Windows-native digital photo prints ordering software for *ifolor AG*

Tech: JavaScript Redux/React Elm Angular Node.js PHP Silex Zend-Framework Nginx PostgreSQL Redis CouchDB Sphinx Linux SaltStack C++/Win32 WTL/ATL GDI+

10/2003–09/2005 XIAG, Novosibirsk

Custom software development company.

Role: **Managing director.**

Run the offshore development center of XIAG AG in Russia. Estimate projects, prepare technical specifications, coordinate the resources, ensure the delivery, hire programmers.

04/2002–09/2003 Center of Financial Technologies, Novosibirsk

Role: **Programmer.**

Work on the application development tools for a company's own banking platform. Improve user experience, speed up routine tasks.

Tech: Oracle Visual-Basic-6 C++/Win32 COM

10/2001–03/2002 iNetLab, Novosibirsk

Role: **Programmer.**

Build a model editor in the domain of seismic geophysics. Maintain other small applications.

Tech: Java Java2D/Swing C++/Win32 Visual-Basic-5

10/2000–09/2001 Auktion24, Novosibirsk

The company that has originally built *ricardo.ch*

Role: **Programmer.**

Take part in building *WeTellYou.com*, a global expert exchange platform with billing and telephony.

Tech: Java Linux Apache-JServ XSLT Oracle Java-RMI

03/2000–09/2000 Glance, Zurich

Role: **Junior Programmer.**
 Build a data model editor & code generator for a company's own ORM; implement an unlimited undo/redo capability. Also maintain an insurance line of business application.
 Tech: C++ Win32 MFC Oracle

Education

10/2005–10/2006 University of Twente, Enschede

PhD associate. Research topic: Aspect-oriented software architecture design. Quit the PhD program, changed to industry work.

2001–2003 Novosibirsk State University

MSc in Applied Mathematics and Informatics. Graduated with honors.

1996–2001 Novosibirsk State University

BSc in Mathematics. Graduated with honors, all "excellent" – top 2% of students.

Personal info

Citizenship	Swiss
Languages	English (fluent), Russian (native), German ($\sim$C1 de facto, B1 in 2013)
Relevant hobby	Competitive programming in C++ and Rust