Jakub Szczerbiński

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📇 Profile

I am a software engineer, with 2 years of experience in the development of mobile networks. I am looking to change my line of work so it better fits my strong sides and interests which include functional programming, distributed, concurrent and multithreaded programming. This is why I want to become a Scala developer.

🧠 Skills

Scala
Scala 2, sbt, Akka Actors, Akka Streams, Akka Persistence, Akka Clusters, Akka HTTP, ScalaTest, Cats, Cats Effect, Chisel

C/C++
C++20, Stdlib, Boost, metaprograming, CMake, GTest, GMock, Google Benchmark, gdb, Valgrind, AdressSanitizer, ThreadSanitizer

JavaScript/TypeScript
Front-end, React, Redux, JQuery, Materialize

Other programming languages
OCaml, Bash, Java, Python, Lua, Haskell, Prolog

Software tools
Bash, Git, SVN, Wireshark, Docker, SQL, PostgreSQL, Jenkins, Websockets

Programming skills
TDD, SOLID, CI/CD, REST, Design patterns, Good understanding of computer architectures and operating systems, Functional programming, Object-oriented programming, Network programming, Theoretical understanding and implementation experience with advanced algorithms and data structures

Soft skills
Problem Solving, Teamwork, Active listening, Constructive feedback, Self-motivation, Working under pressure, Critical thinking

💡 Languages

Polish (Native) | **English** (High proficiency)

French, German (Elementary proficiency)

🎸 Interests

Woodworking | Brewing beer | Movie festivals

Cycling | Popular science books | Cooking

💼 Professional Experience

Junior Software Engineer, *TietoEvry*
2021 Jan – present | Poland
- Developed new features in LTE Baseband for one of the big telecom companies

Software Engineer, *Nokia Solutions and Networks*
2016 Dec – 2017 Dec | Poland
- Worked on software for base transceiver stations.
- Radically shortened system test run time, by redesigning software update functionality. Created and tested new functionality in user management and authentication areas.
- C++ used mainly, tested with GTest/GMock and Python (integration), used Bash/Python for build/automation scripts.

Software Engineering Intern, *Nokia Solutions and Networks*
2016 Aug – 2016 Nov | Poland
- Transitioned to full position above after 3 months.

🎓 Education

Bachelor of Computer Science, *University of Wrocław*
2016 – 2021 | Poland
- Bachelor thesis (in polish): Extending logic simulator for verilog through adding direct support for FIRRTL 🔗
- Notable courses: Algorithms and Data Structures, Computer Architectures, Operating Systems, Computer Networks, Databases, Theory of Programming Languages, Discrete Mathematics, Numerical Analysis

🗂 Projects

Firrtl2digitaljs, *Hardware description language translator* 🔗
- Developed as a part of engineer's thesis
- Targets digitaljs format used by the educational digital logic simulator
- Written in Scala with heavy use of Chisel/FIRRTL compiler infrastructure

MimikerOS, *OS created for educational purposes* 🔗
- Developed by students and staff, heavily inspired by BSD
- Contributed implementation for some of the syscalls

ZOSIA,
Computer science conference for UWr staff, students and graduates
- Organized every winter, attended by around 180 people
- In charge of making promotional materials, helping and overseeing other areas such as finances, sponsors, transport.
- Helped me grow in organizational, teamwork, and people skills. Made me more resilient to stressful situations of working with responsibility on my shoulders and time pressure.

ZOSIA website, *Website for ZOSIA conference* 🔗
- Improved and rebuilt the website in many areas including room booking, automatic email sending, printables generation, data presentation.
- The project gave me an interesting perspective on the development process because I fulfilled many roles (client, product owner, analyst, developer) at different times.