



# Tomislav Karastojković

Mathematician | Entrepreneur | Engineer  
Architect | Open Source Author | Scrum Master

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Tablatstrasse 12  
St. Gallen, Switzerland



Interested for heavy load backends, networking, data structures and algorithms. Delivering architectures that decrease the system entropy and technical debts, providing regular refactoring and test coverage.

Observing software as a result of a team collaboration, thus supporting people before processes. Aware that a team culture is reflected in the architecture and code quality, thus aiming toward transparency, open conversation, consensus and assertiveness.

## Job Experiences

### Senior Software Engineer

Apr 2019 - Now

#### Leica Geosystems

Solutions for the geodesy professionals around the world.

- Working on Spider, the global precise positioning software. Spider suite is the backbone of Hexagon SmartNet, providing the GNSS data infrastructure.
- Lecturing the C++ course, leading the project transition to modern C++.

Tech Stack: C++, C#, .NET, MS SQL, Python, WinAPI, Ntrip, RTCM.

### Open source author

2016 - Ongoing

#### GitHub

Author of the popular open source C++ email library [mailio](#). The library is used by thousands of individuals and companies all over the world.

### Entrepreneur & Consultant

Sep 2017 - Ongoing

#### Alepho

Consultant on various projects and companies.

- Marketing platform based on the face recognition.
- Marketing email campaign platform.
- Driver for mounting file hosting services as Windows local disk.
- LRU caching algorithm for the LevelDB database.
- Implementing financial derivatives calculations like Black-Scholes, Black, Binomial models, and few others.
- Developing real-time server for energy market data.

Tech Stack: C++, Node.js, C#, PostgreSQL, WinFsp, Web sockets, MySQL, LevelDB.

### Senior Developer & Team Lead

June 2013 - October 2016

#### TeleSign

Global leader in two-factor authentication.

- Responsible for the messaging platform as the lead of the Core team. The platform includes set of servers and clients in various protocols under heavy load to support telecom infrastructure.
- Serving as the scrum master and occasionally as the product owner.
- Managing a team of nine engineers.
- Architect of the New generation SMS platform. Optimizing critical parts of the platform.

Tech Stack: C++, Perl, Python, PHP, SMPP, HTTP, SS7, PostgreSQL, MS SQL, Mongo, Redis, RabbitMQ, Linux.

## Software Engineer

Feb 2012 - May 2013

## Software Engineer

Jan 2008 - Sep 2010

## Developer & Administrator

Sep 2005 - Dec 2007

## PSTech/Cisco

Leading Serbian IT services company.

- Leading a small team of developers to deliver conference calls within the VoIP framework Enhanced Call Control, used by Jabber.
- Development of Lotus Notes connector for Cisco Jabber.

Tech Stack: C++, Java, SIP, TCP, RTP, VoIP, Boost, JNI.

## Bakson/Ticketmaster

American ticket sales and distribution company.

- RKiosk – point of sale for selling tickets.
- Development of backend for WMR – web reporting tool for tracking ticket transactions. The platform is main reporting tool within Ticketmaster, processing millions of transactions per month.
- Maintenance of Asra – desktop application for statistical analysis of sold tickets.

Tech Stack: Java, Struts, Tomcat, SOAP, Perl, Python, MySQL, Sybase, Oracle, C++.

## Routo Telecom

British telecom operator on a niche market of sending bulk SMS campaigns.

- As the only developer in a small team, responsible for all development of the platform and web application.
- SMS platform development. The system served few dozens of clients and providers with millions of messages per month.
- Web console for the system monitoring.

Tech Stack: Perl, PHP, C++, JavaScript, PostgreSQL, MySQL, SMS, SMPP, Linux.



## Education & Courses

MSc. Math

Leadership



## Skills

Interests

Languages

Basketball

## University of Belgrade

Departments of mathematics theory.

- Certified Scrum Master, Scrum Alliance
- Certified Scrum Product Owner, Scrum Alliance
- Team leadership and motivation courses, ITO United Change
- Self awareness, Insights Discovery

- Negotiation. Strategic thinking. Assertiveness.
- Computer science and software architecture.
- Programming languages: C, C++, C#, Java, JavaScript, Python, Perl, PHP, SQL.
- Databases: PostgreSQL, MySQL, SQLite, MS SQL, LevelDB, MongoDB, Redis, RabbitMQ, Elasticsearch.
- Networking and web development.
- Serbian (native)
- English (full proficiency)
- French (limited proficiency)
- German (B1 certificate)
- St. Otmar basketball club coach
- OKK Beograd semi-professional player