

# Sergei Volkov

## Curriculum Vitae

### Personal

Citizenship **Russian**  
Languages **Mother tongue: Russian**  
**English: C1 ()**  
**German: B1 ()**  
Driving license **European Driving License: B, C**  
GitLab/GitHub **[gitlab.com/taranarmo](https://gitlab.com/taranarmo), [github.com/taranarmo](https://github.com/taranarmo)**  
LinkedIn **[www.linkedin.com/in/taranarmo](https://www.linkedin.com/in/taranarmo)**

### Education

2010 – 2015 **Specialist degree in Energy Supplies**, *Petrozavodsk State University*

### Work experience

Aug 2023 – **Data scientist**, *Crocus Labs GmbH*  
Feb 2024 Software development, Software architecture, Product design, Project management, Testing, Team leading  
*Despite position name my job was primarily software development as the product wasn't ready at my arrival*  
Jun 2021 – **PhD Student**, *Leibniz-Institut für Gewässerökologie und Binnenfischerei (IGB Berlin)*  
Mar 2023 Research design, Data processing, Field work, Linux systems administration, DevOps  
*Partial employment as a PhD study salary. Wasn't finished due to low performance and wrong expectations from both sides.*  
Oct 2020 – **Data QA**, *Playrix*  
Feb 2023 Data analysis, Validation, ETL design, Manual and automated QA  
*QA in data engineering and then product team. SQL, Python, Apache Spark, Analytics.*  
Mar 2020 – **QA engineer**, *Playrix*  
Oct 2020 Manual QA, Automation, Teaching, Testing documentation writing  
Nov 2019 – **Data analyst**, *Playrix*  
Feb 2020 Data analysis, Automation, User tracking events design, Reporting and presenting to stakeholders  
*SQL, Python, Analytics*  
May 2016 – **Teaching assistant**, *Petrozavodsk state university*  
Jul 2020 Educational program design, Lecturing, Teaching  
*Thermodynamics, heat transfer and other courses*  
Jan 2016 – **Research assistant**, *Northern water problems institute*  
now Data analysis, Field work, Experiment design, Data processing frameworks development, Academic writing, editing and typesetting

### Technical Skills

Development Currently I'm using **Python** (mainly with **PyData** stack), loving **Julia** and learning **Nix**, **Linux** user since 2009.

Can write complex **SQL** query statements and do DBMS management in both SQL-like and **NoSQL**.

Able to work with **Docker** and other containerization tools, used Docker container as an environment to compile MATLAB package with external dependencies including OpenCV via CMake

Designed a **AWS** architecture for a **IoT** application (smart lamps for green houses)

Built simple **IoT** showcase using Docker.

Familiar with **MATLAB**, learned **JS** and **C/C++** a long time ago.

## Communication skills

- Presenting
- Teaching
- Feedback sharing
- Active listening

## Organisational / managerial skills

- Field work organizing
- Managing small team of developers
- Project management

## Projects

2015 – 2017 **Lake Onego: life under the ice, NWPI**

Research and field work

*Joined interdisciplinary project to study the under-ice life*

2021 – 2023 **Lake pycnoclines trap organic particles forming hot spots of accelerated carbon cycling in the water column (PycnoTrap), IGB Berlin**

*Joined interdisciplinary project researching sinking and degradation of biomass in the turbulent environment (lake water column)*

## Awards - Certifications - Licenses

2017 **Machine Learning**, Stanford University at Coursera

Certificate available at <https://www.coursera.org/account/accomplishments/verify/U4VGJWXFGMS9>

## Voluntary

2013 – 2015 **Garbage collection**, On multiple sites near Onego Lake, Petrozavodsk, Russia

2011 – now **OpenStreetMap**, Data surveys and contribution, Republic of Karelia, Russia

## Thesis

2015 **Noniterative heat exchanger calculation**

Supervisor: Professor Sergei Bogdanov

The thesis proposes direct analytical calculation procedure for heat exchanger design, avoiding using of optimization techniques

## Publications

- 2021 **Full Reynolds stress tensor of convective turbulence estimated with paired acoustic Doppler current profilers**, *S. Bogdanov, G. Kirillin, S. Volkov, G. Zdrovennova*
- 2019 **Fine scale structure of convective mixed layer in ice-covered lake**, *S. Volkov, S. Bogdanov, R. Zdrovennov, G. Zdrovennova, A. Terzhevik, N. Palshin, D. Bouffard, G. Kirillin*
- 2019 **Under-ice convection dynamics in a boreal lake**, *D. Bouffard, G. Zdrovennova, S. Bogdanov, T. Efremova, S. Lavanchy, N. Palshin, A. Terzhevik, L. Vinnå, S. Volkov, A. Wüest, R. Zdrovennov, H. Ulloa*
- 2019 **Structure and dynamics of convective mixing in Lake Onego under ice-covered conditions**, *S. Bogdanov, G. Zdrovennova, S. Volkov, R. Zdrovennov, N. Palshin, T. Efremova, A. Terzhevik, D. Bouffard*
- 2018 **Albedo of a Small Ice-Covered Boreal Lake: Daily, Meso-Scale and Interannual Variability on the Background of Regional Climate**, *G. Zdrovennova, N. Palshin, T. Efremova, R. Zdrovennov, G. Gavrilenko, S. Volkov, S. Bogdanov, A. Terzhevik*

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