George Agapov

Software developer

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Summary

I am a software developer with more than 8 years of professional experience. I hold Bachelor's and Master's degrees from one of the leading Russian Computer Science schools, ITMO University. I have a background in many areas of CS including distributed systems, PLT, cryptography and ML. In addition to software development skills, I have practical experience in leadership, project management and financial markets.

Work experience

Senior protocol engineer

June 2021 - Today

O(1) labs

Working on upgrading networking stack of Mina Protocol. My work aims to improve blockchain's stability and performance by switching to a new architecture modeled with a data-driven approach.

Technical lead

October 2019 - June 2021

Serokell OÜ

As the leader of a development team, I worked on three different projects commissioned by the StakerDAO, a customer of Serokell. For all the projects I prepared project plans and schedules, acted as a chief architect, a Haskell developer and as the primary point of contact for the customer.

The last of the projects, StakerBridge was launched in March 2021, featuring a web application, allowing a user to trustlessly swap the tokens between Algorand, Ethereum and Tezos based on the custom DoSresilient version of the commonly used token swap protocol.

Part-time lecturer

February 2019 - June 2021

ITMO university

Teaching functional programming. The course covers Haskell from the very basics to advanced techniques and is aimed at giving students a solid experience in language constructs as well as their practical application.

Project manager

June 2019 - July 2020

Serokell OÜ

Working as a project manager on Serokell OÜ projects. As a PM I drove the development of Pont.ee, a work-related IT service integrator built in-house by Serokell. I redefined the internal toolset app to a commercially-oriented SaaS product, prepared the project plan and conducted the execution to the launch in July 2020.

Technical lead (various projects)

March 2018 - May 2019

Serokell OÜ

Leading the development of several blockchain projects (Haskell and OCaml).

Technical lead (Cardano SL project)

October 2016 - February 2018

Serokell OÜ

I worked as the leader of the Core team behind Cardano SL (one of the top 10 cryptocurrencies). The team was responsible for the design and development of blockchain's core (ledger, consensus, networking) down to the mainnet launch.

Serokell OÜ

Worked on Haskell implementation of RSCoin cryptocurrency and on a related webapp. I joined the team close to the project's deadline, quickly jumped in and greatly helped the existing team to meet the deadline.

Software developer

July 2014 - September 2016

Devexperts GMBH

Developing software for brokerage services (Java). I worked on back-office software for a UK-based forex broker. I effectively rearranged the product's architecture to allow for the rapid development of new features. Then I worked as a developer in a team maintaining a derivative trading solution serving thousands of users.

Lead software developer

February 2013 - December 2013

Podfm.ru

I worked as a lead developer in a team maintaining a podcast website with 10'000+ daily downloads.

Education

Master's degree in Applied mathematics and informatics

2016 - 2018

ITMO university

I learned algorithms and gained experience in some new areas of Computer science such as coding theory, genetic algorithms, bioinformatics and project management. Under my thesis "Mathematical model of proof of stake cryptocurrency" I developed a math model for proof of stake cryptocurrency based on simple functionality requiring access to the local key-value database. The model allowed to notably easily formalize delegation and stake-based update voting in a generic way.

Bachelor's degree in Applied mathematics and informatics

2012 - 2016

ITMO university

I graduated from the Computer technology department of ITMO University, a leading Russian CS school. During my bachelor's I implemented over 30 projects of varying size. I gained strong skills in many areas of CS, including formal logic, compiler design, computational geometry, distributed computing and machine learning. Under my thesis "Alignment of thesauruses YARN and PWN" I performed some morphology analysis of Russian and English thesauri in order to align their synonym sets with the use of crowdsourcing.

Additional information

My technical toolset:

- Haskell: Professional knowledge of the language, extensions and libraries.
- C/C++: Good knowledge of the language. Hands-on experience in writing safe and efficient code.
- Java: Professional knowledge of the language, a holder of a certification badge.
- Kotlin: Good knowledge of the language. Experience developing backend and frontend (JS) applications.
- R: Vast experience in the statistical analysis of financial data.
- Web stack: HTML/CSS, JS and its frameworks, PureScript.
- System programming: good knowledge of Linux / Posix, shell and nix.
- Some experience in Agda, Julia, Ocaml.

In my free time, I study cryptography, computational statistics, finance and economics. My wife, son and I reside in Andorra, a beautiful country in Pyrenees. I love listening to classical music, reading, traveling and jogging. Fluent English speaker. Basic German speaker.