Functora

Hi-end quality software development. Reliable. Functional. Pure.

About

I am pseudonymous software developer Functora. I do specialize in a software development with <u>Haskell</u> and <u>Nix</u> languages since 2019. I work with passion and create the best software using the best technologies. My areas of expertise and interest are <u>Bitcoin</u>, <u>Lightning Network</u>, sound money, trading, free markets, privacy and sovereignty. My primary technical goals are type-level guarantees of software correctness and safety.

Skills

Haskell is my primary and the most favorte tool. I do have advanced level of Haskell including:

- GHC.Generics, generic-lens and SYB for efficient data manipulation.
- GHCJS compiler, GHC WASM backend and JSaddle EDSL.
- Presistent and Esqueleto typed SQL drivers.
- Yesod enterprise web framework.
- Miso frontend web framework.

I am also qualified in other useful areas:

- <u>Nix</u> and <u>NixOS</u> Strong medium level. Nix is the best tool for deterministic builds, tests and development environments. I am using NixOS daily.
- <u>Bitcoin</u> and <u>Lightning Network</u> Advanced level as application developer (not as protocol developer). Bitcoin is the greatest achievement of the new millennium, which brings financial freedom and sovereignty back to the people.
- <u>PostgreSQL</u> and <u>SQLite</u> Strong medium level. I am not database expert, but I am using everything what software developer should use to manipulate data storage. Queries, transactions, joins, locks.
- <u>Docker</u> and <u>Swarm</u> Advanced close to expert level. I am using Docker and Swarm for development, builds and production. Docker is a very handy tool for MacOS and Linux compatibility.

Code

Examples of my personal code:

- <u>currency-converter</u> An app for converting currencies, generating financial documents, and sharing them via links or QR codes. It includes optional client-side encryption. Built using Miso and GHCJS, the source code is available on <u>github</u>. Mobile version is also available on <u>Google Play</u>.
- <u>lightning-verifier</u> An app for offline verification of <u>Lightning Network</u> invoices and preimages, and sharing them via links or QR codes. It includes optional client-side encryption. Built using Miso and GHCJS, the source code is available on <u>github</u>.
- <u>delivery-calculator</u> A simple app to estimate delivery costs, generate orders in Excel spreadsheet format, and share them with merchants. Built using Miso and GHC WASM backend, the source code is available on <u>github</u>.
- <u>functora</u> My own collection of various general-purpose libraries, most of which work with both GHC and GHCJS.
- <u>Ind-client</u> Lightning Network Daemon (LND) client library for Haskell.

- <u>bfx</u> Bitfinex cryptocurrency exchange client library for Haskell.
- miso-functora Reusable Miso widgets, composable through optics.
- <u>rentier</u> My first Haskell project which I have used to learn Haskell. The booking system is based on the Yesod web framework. The code is very obsolete.

Examples of other code I was actively working on with other people:

• <u>btc-lsp</u> - Bitcoin Lightning Service Provider.

Blog

- <u>Bitcoin Seed Security</u> September 18, 2025
- Offline Lightning Wallet October 23, 2020
- <u>Sovereign Web Introduction</u> October 15, 2020

Contact

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