

Skills: JavaScript TypeScript ethers.js React React Native Node.js GraphQL Solidity

Experience

- Risk Labs** risklabs.foundation Aug 2022 to Present

Full Stack Engineer (Frontend-focus)

As a web3-focused full stack engineer at Risk Labs, I am a core contributor to the Across Protocol (<https://across.to/>) - the most secure and fastest bridge for Ethereum.

Used tech: TypeScript, React, Ethers, hardhat, Node.js, Nest.js, react-query, styled-components, Next.js, GitHub Actions, Jest, Cypress, Apache Airflow

 - Core contributor to UI (<https://github.com/across-protocol/frontend-v2>), SDK (<https://github.com/across-protocol/sdk-v2>) and indexer (<https://github.com/across-protocol/scrapper-api>)
 - Built Airflow ETL pipeline from scratch
- Redeemeum Labs** redeemeum.com Oct 2021 to Dec 2022

Full Stack Engineer

As a web3-focused full stack engineer at Redeemeum Labs, I was a core contributor to the Boson Protocol (<https://www.bosonprotocol.io/>) - a decentralized commerce protocol based on Ethereum.

Used tech: TypeScript, AssemblyScript, React, Ethers, hardhat, Node.js, Express, GraphQL, IPFS, react-query, styled-components, Next.js, GitHub Actions, lerna, turborepo, npm workspaces, Jest, Cypress

 - Leading contributor to v2 SDKs, DApps, widgets, and subgraph (<https://github.com/bosonprotocol/core-components>)
 - Driving force for improved quality, practices, processes, and DX within the team
- brainbot technologies AG** brainbot.com Aug 2020 to Oct 2021

Frontend Engineer Berlin

As a web3-focused frontend engineer at brainbot technologies, I was a core contributor to the Trustlines Protocol (<http://trustlines.network/>) - a decentralized mutual credit system based on Ethereum.

Used tech: TypeScript, Ethers, React, React Native, Jest, Redux (sagas and thunks), Storybook, Gatsby, tailwindcss, CircleCI, GitHub Actions, Mocha/Chai, Detox

 - Leading contributor to the TypeScript/JavaScript library (<https://github.com/trustlines-protocol/clientlib>)
 - Leading contributor to the React Native Mobile App (<https://trustlines.app>)
 - Leading contributor to several React-based static sites (<https://trustlines.network/>, <https://trustlines.foundation/>)
- brainbot technologies AG** brainbot.com Apr 2017 to Aug 2020

Frontend Engineer (Part-Time) Mainz and Berlin
- Simon-Kucher & Partners** simon-kucher.com Jun 2016 to Oct 2016

Full Stack Engineer (Part-Time) Darmstadt

As a full stack engineer, I digitalized a simulation game the company uses to educate its clients about basic pricing mechanisms.

Used tech: JavaScript, Angular, Express, Node.js, MongoDB, Mongoose, Mocha/Chai
- Lufthansa LEOS** lufthansa-leos.com Oct 2015 to Sep 2016

External Consultant and Full Stack Engineer (Contract) Frankfurt am Main

As full stack engineer, I developed, maintained, and enhanced modules of a web application, which is used as a monitoring, reporting, and controlling tool for various business processes in the company.

Used tech: JavaScript, Angular, Express, Node.js, MongoDB, Mongoose, Mocha/Chai

Publications

Privacy-Preserving Netting in Local Energy Grids

2nd IEEE International Conference on Blockchain and Cryptocurrency 2020

🌐 www.ise.tu-berlin.de/fileadmin/fg308/publications/2020/preprint-ICBC-Eberhard.pdf

Co-author of the paper and the main contributor to the prototype

<https://github.com/JacobEberhardt/decentralized-energy-trading>

A Response to the United Nations CITES Blockchain Challenge: Incremental and Integrative PoA-based Permit Exchange

1st IEEE International Conference on Blockchain and Cryptocurrency 2019

🌐 deposi.tu-berlin.de/bitstream/11303/9170/4/busse_etal_2019.pdf

Co-author of the paper and the main contributor to the prototype

https://github.com/cites-on-blocks/cites-on-blocks_dapp

Education

- **TU Berlin** 2017 to 2020
M. Sc., Information Systems Management
Thesis: Nightlines - Privacy-preserving IOU Tokens (Grade: 1.0 German / 4.0 GPA)
Text: <https://github.com/dohaki/master-thesis/blob/master/thesis/main.pdf>
Prototype: <https://github.com/dohaki/nightlines>

Used tech: zkSNARKs, ZoKrates, Solidity, JavaScript
- **TU Darmstadt** 2013 to 2017
B. Sc., Business Informatics
Thesis: Chances and Challenges of Decentralized Applications (Grade: 1.0 German / 4.0 GPA)

Languages

- English Fluent
- Korean Advanced
- German Native

Interests

- Cooking
- Web3 and Software Engineering
- Experiencing cultures through food and travel