# David Himmelstrup

## Software Enthusiast

Çlemmih ⊠lemmih@gmail.com �lemmih.com ♀Copenhagen, Denmark



## Work experience \_\_\_\_

January 2022 - March 2025

ChainSafe - Remote

## Protocol Engineer

Lead developer of an in-house Filecoin client. Part of the global Core Devs team, reviewing and proposing protocol changes. Designed new file format that became the default for sharing blocks.

May 2019 - December 2020

## Standard Chartered - Singapore Quantitative Developer

Joined the DevOps team, responsible for managing on-premise services supporting a team of twenty developers. Implemented automated regression testing of a custom pricing platform.

November 2016 - September 2017

AlphaSheets - Remote Software Engineer

Worked on a parallel scheduling system for spreadsheets with support for multiple programming languages. Written in Haskell, and deployed with Nix.

March 2012 - October 2013

Better AG - Zurich, Switzerland Software Engineer

Co-designed and deployed a full-stack e-learning platform in an 8-person startup, balancing backend Haskell development with JavaScript frontend engineering across cross-functional roles.

February 2006 - March 2008

**HAppS** - Remote Software Engineer

Designed a series of web-development libraries in Haskell with a small team. Two of the libraries got traction in the open-source community and are still being maintained: happstack and acid-state.

#### EDUCATION \_\_\_\_\_

Graduated in 2019 with a BSc in Computer Science from the University of Copenhagen. Partial credits towards a MSc.

### Public Projects \_

### criterion

Statistics-driven benchmarking library for Rust. Has multiple built-in statistical approaches, as well as dedicated WASM support.

## rgeometry

Algorithms and data structures for computational geometry in Rust. The most comprehensively tested geometry library in existence.

## Reanimate

Batteries-included library for expressing illustrations and animations as Haskell code. Inspired by 3b1b's manim library.

## LHC

The LLVM Haskell Compiler is a toy project for exploring the intricacies of the Haskell programming language.

## haskell-suite

Toolchest of Haskell libraries for introspection: parsing, scope analysis, name resolution, type inference, etc.

## cabal-install

Co-founded in 2005 with Isaac Jones, cabal-install has become a key part of the Haskell ecosystem. It is still maintained to this day.

## acid-state

Acid-state is a tool for rapid prototyping, adding persistence and ACID guarantees to any Haskell structure without the need for a database.

#### Approach to engineering \_

Driven and self-motivated, with a passion for deterministic code and deep property-based testing. Usually writes code in Rust and Haskell, often compiled to WASM, deployed with Nix, and tested with absurd amounts of compute.