Owen Shepherd

About Me & Contact

- 🅰️ English, French
- 🌐 United Kingdom, Australia, Ireland
- 🌐 owen.cafe
- ✉️ owen@owen.cafe
- 📞 +353 85 232 8475

Experience

June 2022 - present

Tiko Energy Solutions - Consultant SE

Implemented core components of our Virtual Power Plant, as well as our next generation of smart home controllers.

》 Haskell, ❄️ Nix,

May 2021 - June 2022

Symmetry Investments - Consultant SE

Language implementer. Wrote a tail call elimination optimization pass. 10x speedup, and enabled infinite recursion.

▶️ Dlang

May 2020 - April 2021

HubSpot - Senior Software Engineer

Implemented DSLs to describes and execute data aggregation, transformation, diffing, and syncing.

》 Haskell, ❄️ Nix, ⚙️ k8s, 🐳 docker, 🗿 scylla, 📚 redis

May 2018 - December 2019

HubSpot - Fullstack Software Engineer

Led greenfield projects used by millions of people.

⚛️ React.js, 🌀 Redux, 🐏 Ramda, ☕ Java, 🐬 MySQL

December 2019 - April 2020

Obsidian Systems LLC - Consultant SE

Developed Haskell web frameworks, that share code and state across the stack, and have strong compile-time correctness guarantees.

》 Haskell, ❄️ Nix, 🔻 Scala, 🔺 Akka

Internship - Summer of 2017

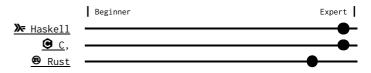### Arista Networks - Linux Kernel Engineer

Wrote linux kernel modules to take advantage of DMA hardware in network switches.

ⓒ C, 🐍 Python

Open Source Contributions

- Generalize compensated summation algorithms to work over the RealFloat typeclass.
- Response Bucketing Added the ability for language server requests to be executed atomically
- Selection Formatting Added the ability for a user to format all current selections

See all my public PRs

Skills

| Beginner | Expert |

- 》 Haskell
- ⓒ C,
- Ⓡ Rust
- ❄️ Nix ✖️ Reflex-FRP, ◆ Git

Education

Trinity College Dublin

Bachelor's degree in Computer Science.

Chairperson of Netsoc, Trinity's computer science society.

Online Courses

4 weeks each
- Fundamentals of Quantitative Modelling
- Basic Modelling for Discrete Optimization

Projects

The Piq Programming Language

Piq is a statically-typed, type-inferred, compiled programming language, written in C99.

ⓒ C

The Phage Programming Language

A functional, homoiconic, expressive, metaprogrammable programming language.

》 Haskell

Try Lambda

Lambda calculus step-by-step simplifier REPL.

🦬 Bison, ⓒ C, 🆁 JS

Conway's Game of Life GBA

An implementation of Conway's Game of Life for Gameboy Advance, implemented in C on bare-metal.

ⓒ C

See more projects on Github or My Website

Competitions

- NWERC 2016 - 1st Irish team
- UKIEPC - 1st Irish team
- Arista Hack-A-Switch (internal) - won two out of five categories
- Bloomberg Codecon @TCD 2017 - 2nd
- ZeroDays security 2017 / 2018 / 2019 - 1st
- HackTrinity 2018 - 2nd

Favourite Tech Books

- Haskell Programming (from first principles)
- Learn you a Haskell for Great Good
- Type-Driven Development with Idris
- The Rust Programming Language