# Contact About Me

## 414owen@gmail.com

+353 85 232 8475

4 Millview The Kybe Skerries Co. Dublin IRELAND K34 W985

# Links

My Website (written in my own web DSL) My Github

# Languages

*Native:* English *Fluent:* French

# Programming

JavaScript
Haskell
Elm
C
C++
Rust
Scala
Python
Java
Bash

# Misc.

Regex LAT<sub>E</sub>X I am a professional full-stack software engineer and open-source enthusiast. I am a self-driven learner, and am always teaching myself new programming languages. I love making things, and have a lot of side projects to show for it.

# **Programming Skills**

### **Competitions Participated In**

- NWERC 2016, the Northwestern Europe Regional Contest, my team was the best of the six Irish teams competing
- My team came first of the Irish teams in UKIEPC 2016
- Won two out of five categories in Arista Networks Hack-a-Switch 2017 (internal)
- UKIEPC 2015
- Google HashCode 2016
- IRLPC 2016
- Microsoft Coding Competition 2016 (@ TCD)
- Bloomberg Codecon 2015 and 2016 (@ TCD)
- Workday Hackathon 2016 (@ TCD), won third place

## **Side Projects**

- In JavaScript, I made a DOM manipulation library that's a 1:1 mapping of markup syntax to JavaScript function calls, found here, with client-side URL router plugin here
- In C, I made an interpreter for the two-dimensional programming language Befunge-93. My interpreter is around three times faster than the reference implementation, and can be found here
- In Rust, I wrote a Turtle Graphics interpreter that outputs Vector Graphics, and includes two neat demo programs, here
- In Bash I scripted the above to produce this video and this video, the scripts reside here
- In JavaScript, I made a Music Recommendation webapp, and physics engine, found here
- In Scala, I made a Brainfuck interpreter that can be found here
- In Elm, I made a massively multiplayer drawing webapp here
- I recently started a blog, (Markdown -> Nutmeg -> Website) about tech here
- in C#, I wrote a reverse-polish boolean logic evaluator, found here
- In a three-hour hackathon, two of my friends and I made this awful terminal game, which I'm far too proud of
- In VimScript, I made a small vim plugin to turn lines into ascii headings here

# **Experience**

## 2016 - present **Software Engineering Intern**

Arista Networks, Dublin

I am currently working full-time at Arista Networks for the summer. I work on the platform team. My team and I write a lot of low-level, extremely optimised C, touching our custom linux kernel, userspace, and everything in between. At the moment, I'm developing a linux kernel module and kernel patchset.

### 2017 - present **Software Engineer**

BetterExaminations, Dublin

I worked part time at BetterExaminations from April to July, doing mainly frontend work on the third-level version of their product. We used React and Ruby on Rails.

## Summer 2016 **Software Engineering Intern**

Workday, Dublin

I interned at Workday over summer on the Data Services team. For my main project I used modern web technologies to develop an internal navigation system that determined a device's position by the strengths of wifi signals.

Technologies used:

- React, React-Router, JSX, etc.
- Ionic (Cordova + AngularJS)
- HTML5 Canvas
- Leaflet + GeoJSON
- Webpack
- ECMAscript6 (transpiled down to ES5 using babel)

When I'd finished this project I wrote Scala code for my team.

#### 2017 - present **Netsoc Auditor**

Trinity College Dublin

I am the auditor (chairperson) of Trinity College Dublin's Netsoc. This involves coordinating the committee and being accountable for the society's actions.

#### 2015 - 2017 Netsoc Sysadmin

Trinity College Dublin

I was a sysadmin (root user) of Trinity College Dublin's Netsoc servers. This involved maintaining our range of services, including hosting hundreds of websites for our members and other societies, IRC, emails, etc.

## 2016 - 2017 **Netsoc Public Relations Officer**

Trinity College Dublin

I was the PRO for Trinity College Dublin Netsoc. This involves liaising with large companies, the college, our three hundred members, and other societies. It was my job to procure sponsorship, and to design and oversee the distribution of all printed and online material.

# **Education**

2015 - present

## **Computer Science Student**

Trinity College Dublin

I have completed two years of Integrated Computer Science at Trinity College Dublin. I have taken these modules:

- CS1003 Mathematics
- CS1010 Introduction To Programming
- CS1013 Programming Project I
- CS1021 Introduction to Computing I
- CS1022 Introduction To Computing II
- CS1025 Electrotechnology
- CS1026 Digital Logic Design
- CS1031 Telecommunications I
- CS1081 Computers And Society
- CS2010 Algorithms And Data Structures
- CS2014 Systems Programming I
- CS2016 Concurrent Systems And Operating Systems
- CS2021 Microprocessor Systems
- CS2022 Computer Architecture I
- CS2031 Telecommunications II
- CS2041 Information Management I
- CS2013 Programming Project II
- MA2C03 Discrete Mathematics
- BCPHLO Problems In Philosophy

First year exam grade (overall): 1st Second year exam grade (overall): 1st