

**NAME**

Stephen Cochrane

**CONTACT**Email: [skiqqy@redxen.eu](mailto:skiqqy@redxen.eu)

Twitter: @posix\_patrol

Website: <https://skiqqy.xyz/>**NOTE**

This document should be viewed by running:

**\$ man <(curl -s https://skiqqy.xyz/skiqqy.1)****DESCRIPTION**

I thoroughly enjoy Software Development (specifically lower level) and enjoy working in the GNU/Linux ecosystem. I am an advocate of the FOSS movement, and believe in it's ideals.

**ACADEMIC QUALIFICATION**

- BSc in Mathematical Sciences (Computer Science).
- Matric Certificate.

**SKILLS**

I am proficient in backend web development (either in C, java or python) as well as working with databases. I also have sys-admin experience and work with docker regularly, as everything on *skiqqy.xyz* is hosted locally on my own machines inside containers (some containers made by me) and managed by myself.

**Skill Matrix**

Language	Experience	Level [1-10]
C	3 Years	8
Java	3 Years	7
Python	2 Years	7
Bash	3 Years	9
POSIX sh	3 Years	9
Scala	1 Year	4
C++	1 Year	5

Technology	Experience	Level [1-10]
Git	3+ Years	9
Docker	2 Years	7
GNU Core Utils (grep, sed, etc)	3+ Years	8
Vim	3+ Years	7
tmux	3 Years	7
ssh	3 Years	7

Operating Systems	Experience	Level [1-10]
Any GNU/Linux OS	4+ Years	9
MacOS	2 Years	7
Windows	4+ Years	6

**WORK EXPERIENCE****At/for Stellenbosch University**

I have tutored and or demi'd multiple courses for SU, those including,

- First Year Mathematics
- Second Year Computer Science

## SELECTED ARTIFACTS

These projects are hosted on a private repository, since many of these projects are re-used by SU, and hence must be hosted privately to prevent students from plagiarising.

If you are interested in viewing these, please send me an email, and I can provide you with a .tar of the project.

### ALAN Compiler

ALAN is a pascal like language, and my second year Computer Science project was to write a compiler for the ALAN language, for more information feel free to read the spec. The compiler is written in C.

### Othello Bot

This project was to create a bot to play the game Othello, the bot makes use of a negamax tree search with alpha beta pruning to find optimal moves. Written in C, using MPI API.

### OnPoint

OnPoint is a food review website, that allows users to view reviews on certain websites, as well as create an account, and follow friends, and see their favorite restaurants.

OnPoint is written using a python backend (running on flask), neo4j DB, redis and Vue.js

### Huffman Encoder

A compression tool using the Huffman algorithm, written in x86\_64 assembly.

### Shell Scripting

Most of my shell scripts can be found in <https://git.sr.ht/~skiqqy/bin> and details on them can be found at <https://skiqqy.xyz/site/scripts.html> and <https://blog.skiqqy.xyz/shell/>

## PRIVATE PROJECTS

### ctagd

ctagd is a tagged based message passing over sockets library. The main goal of ctagd is to make working with sockets in C as simple as possible. It achieves this by making the process of setting up sockets trivial, as well as constructing and passing messages easy.

ctagd is hosted at <https://github.com/skiqqy/ctagd>

### cmesg

A messaging application using a server written in C, and a client written in java, there are plans to extend cmesg to also support VoIP.

cmesg is hosted at <https://github.com/skiqqy/cmesg>

### C45DiscordBot

A simple discord bot written in python, plans to extend it to play music, host files etc.

C45DiscordBot is hosted at <https://github.com/skiqqy/C45DiscordBot>

### Other

For a full list of my projects, one can find a list at <https://skiqqy.xyz/site/projects.html>

## HOBBIES

- Springbok Scout
- Hiking

## SEE ALSO

Main Website: <http://skiqqy.xyz/>

Git: <https://sr.ht/~skiqqy/>

Git: <https://github.com/skiqqy/>

Twitter: [https://twitter.com/posix\\_patrol](https://twitter.com/posix_patrol)

## REFERENCES

- Willem Bester (Lecturer): [secretary@cs.sun.ac.za](mailto:secretary@cs.sun.ac.za)
- Ingrid Webster (Scout Master): [iwebster@sun.ac.za](mailto:iwebster@sun.ac.za)
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