# Sam Robert Whitehead

## https://github.com/Ytrewq13

Tel: +447478190577

Emails: sam.everythingcomputers@gmail.com
psysrw@nottingham.ac.uk
sam@samwhitehead.net

Currently in my fourth year studying Computer Science at the University of Nottingham. Interested in all aspects of software development, with particular interest in system administration and operating system design.

## Education

### University of Nottingham                                      2018-09 − current

Degree: MSci Computer Science

First year grade: First
Second year grade: First
Third year grade: First

- Experience implementing various *algorithms and data structures* in C.
- Modules include: *Object Oriented Programming*, Functional Programming (Haskell), *Compiler design* and implementation.

### NEW College Pontefract                                        2016-09 − 2018-07

**A Levels**

Achieved 3 A Levels, with grades A*AA.

## Experience

### Teamwork experience

**Student Exec Treasurer at NEW College Pontefract**              2017-09 − 2018-07

*Tracked Student Exec funding* for the year, and *allocated budget* to Exec projects.

**Software Engineering Group project − designated *gitmaster***   2019-09 − 2020-06

- Organised the *git* repository for the project's source code - Advanced *version control*.
- Managed the ideas of a *diverse group* of people to create a *cohesive software solution* to an *industry challenge*.

### Personal Programming Projects

| **Project description** | https://github.com/Ytrewq13/... |
|---|---|
| • Mandelbrot generator in C | mandelbrotc.git |
|    *Libpng* for storing images, *complex arithmetic* and *multithreading* in C. | |
| • Maze generator and solver in Java and Javascript | mazemaker.git |
|    *Optimisation* of Javascript rendering code, *A\* search* algorithm. | |
| • WebP image loader in C (extension of sxiv image viewer) | sxiv.git |
|    Learned *Google's WebP API* and sxiv's *pre-existing codebase* to solve a *real-world problem* with an *open-source software project*. | |

## Programming Languages

C, Bash, Haskell, Python, LaTeX,  R (ggplot2), AWK, SED, VimL,  Groff, C++, Perl,  SQL, Javascript, Java,  Lua, PHP, C#, Agda, Coq, …

## Technologies

Vim, Linux, Git, SSH,  Clang/LLVM, CMake, Systemd,  GDB, Ansible,  ARM architectures, Make,  Email (postfix, dovecot, OpenDKIM), …