# 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
 Libpnq for storing images, complex arithmetic and multithreading in C.

mandelbrotc.git

• Maze generator and solver in Java and Javascript Optimisation of Javascript rendering code,  $A^*$  search algorithm. mazemaker.git

• WebP image loader in C (extension of sxiv image viewer)

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), ...

# Sam Robert Whitehead

https://github.com/Ytrewq13

电话: +447478190577 电子邮件: sam.everythingcomputers@gmail.com psysrw@nottingham.ac.uk

sam@samwhitehead.net

我现在就读于诺丁汉大学,是一名大四的学生,主要学习软件开发和编程。

# 教育

**诺丁汉大学** 2018 年 09 月 — 现在

学士,专业: 计算机科学

大学一年级: Distinction 大学二年级: Distinction 大学三年级: Distinction

• 各种算法和数据结构 (C 语言).

• 课程: 面向对象编程, 功能编程 (Haskell) - 基本面和先进的技术, 软件工程小组项目, 编译器设计

### 新大学 Pontefract

2016年09月—2018年07月

A Levels

实现了 3 个 A-Level, 成绩是 A\*AA

## 经历

#### 团队合作经验

新大学 Pontefract 的学生主管司库

2017年09月-2018年07月

跟踪了年度支出 为项目分配了预算

### 软件工程小组项目 - 版本控制主管

2019年09月-2020年06月

- 为该项目的git存储库进行了组织源代码-高级版本控制。
- 管理了一个多样化群体的想法, 创建一个内聚软件解决方案 行业挑战。

#### 个人编项目

项目介绍

https://github.com/Ytrewq13/...

mandelbrotc.git

- 曼的布罗特渲染器的 C Libpng用于在 C 中存储图像,复杂的算术和多线程
- 迷宫发生器和求解器的 Java 和 Javascript JavaScript 呈现功能的优化, A\*搜索算法

mazemaker.git

• C 中的 WebP 图像加载器(sxiv 图像查看器的扩展)

sxiv.git

学习了Google 的 WebP API和 sxiv 的预先存在的代码库,以通过开源软件项目解决现实世界的问题

# 编程语言

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

# 技术

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