Peter HU

University of Cambridge |
Computer Science Part IA |

Jardines *Scholar*

Contact Details
Email: zh369@cam.ac.uk
Phone: (+44) 07990 719841
LinkedIn: https://www.linkedin.com/in/peterhu2022
Github: https://github.com/PeterHUistyping
Personal Home Page: https://peterhuistyping.github.io

ABOUT ME

I am a Computer Science student studying at University of Cambridge. What I really enjoy is the beauty of Computer Science and how it can be applied in real life. Having used C/C++ for over a whole year, I also learn other programming languages. With the help of OpenCourseWare, I gain more knowledge myself on different kinds of field. I am open to new fields of area and enjoy exploring unknown features. Meanwhile, it's also part of my daily routine to learn more around Algorithm and Data Structure, Database, Computer Graphics etc.

TECHNICAL SKILLS

Math Background
Calculus, Linear Algebra, Discrete Math, Probability and Statistics
Exploring: Abstract Algebra, Topology (basic)
OS: MacOS, Linux, Windows

Programming Background
C, Cpp, Java, Python, OCaml, HTML/ CSS, Latex,
SQL: Postgre, SQLite, HSQL; NoSQL (Python)
Exploring: C#, JavaScript

EDUCATION BACKGROUND   SEE MORE ON LINKEDIN

University of Cambridge   *2022.10 - Till now*
Undergraduate, Computer Science
Supported by fully funded Jardine Scholarship.

Class Rep, ACM Team training.
GPA: 3.91 / 4.0 (first term), 88/100 (the whole year)
Nanyang Model High School   *2018.09 - 2021.06*
High School Diploma
Physics Rep, Leader of a research project.
I have been awarded ShuPing Scholarship twice.

Xiamen University   *2021.09 - 2022.06*
First year of Undergraduate, Software Engineering

COURSES TAKEN

OOP, Digital Electronic, Database, Programming Languages listed above, Math, Computer Graphics, etc

PROJECT AND ASSIGNMENT   SEE MORE ON GITHUB

Previous

Huawei Tech Arena *2022.10.20-2022.11.26*
Gold Medal with £7000, the first in Leader Board.
In a team of 4, dealing with pre-processing, serialization.
· Responsible for implementation & improvement of LZSS.
· Optimization using C pointers, bitwise operators & hash tables. GPU optimization: Branch Prediction.
· Multi-threading, Parallelization, Concurrent Processing.
· Leading the team and communicate with other teammates.

Database Design Project (C++)   *2022.8-Now*
[CMU15-445 Project] Project (Github) | 📝 Blog
·Buffer Pool Management System, Latch, LRU
·Replacement policy, Buffer Pool Manager Instance. In order to solve the concurrent problem, implement the PARALLEL Buffer Pool Manager.
Using C++ STL, Google C++ Style Guide

Introduction to Computer Graphics   *2022.7-2022.9*
[MIT6.837 Assignment] | 📝 Blog

·Ray casting, normal visualization, rendering, voxel rendering, super sampling and 3D
·OpenGL visualization using C++.
·Implement classes of cameras, several types of primitive objectives, light.

Multifunctional Supermarket Management System
[Cpp & OOP Project] 2022.4 Project (Github) | 📝 Blog
·Inheritance, polymorphism (Operator Overloading)
·Read/Write Files, just to name a few

Typing Game   *[C Programming Project] 2021.12*
Graphically Beautiful Interactive Game
C & EasyX. Project (Github) | 📝 Blog

Ongoing

Artificial Intelligence CS229
Learning required Math and Coding at the same time
Java & Algorithm C/C++ (Not posted)
[Leetcode] Algorithm - to be updated

INTEREST AND EXTRACURRICULAR ACTIVITIES

Music, swimming, yoga, gym, helping others etc. | Society Joined: Ethics in Mathematics
Economics Related Topics: Macro & Micro, Money Banking

Personal Home Page: https://peterhuistyping.github.io