# Guqiao Liang

Nottingam UK | scygl3@nottingham.ac.uk | tel:+44 7379540426 | www.linkedin.com/in/GuqiaoLiang/github.com/GuqiaoLiang

#### Education

#### University of Nottingham, United Kingdom One-year Exchange

Sept 2025 - Jun 2026

• **Key Modules:** Developing Maintainable Software (Agile method and DevOps principles), Operating System and Concurrency

University of Nottingham, Ningbo China BS in Computer Science

Sept 2023 - Jun 2027

- Current GPA: 4.0/4.0 (81/100)
- **Key Modules:** Software Engineering, Programming Paradigm, Introduction to Artificial Intelligence (95/100), Mathematics for Computer Science(93/100)

## Language proficiency

IELTS 8/9

• Reading: 9 Listening: 9 Writing: 7 Speaking: 6

German A2

• Taking interfaculty German Course at the University of Nottingham

#### **Awards**

Provost's Scholarship Sept 2024

Ranked Top 5% among computer science major students

Outstanding Freshman Scholarship

Sept 2023

Ranked Top 10% among Gaokao students

## **Technical Experience**

#### **LLM-based Spreadsheet Processing Agent** University of Nottingham

Sept 2025 - Present

- Elected as the group administrator, responsible for meeting arrangement and project progress supervision
- Conducted background research on the application of LLM in spreadsheet handling, compared and contrasted different products
- Created a pitch video highlighting the limitation of existing products and presenting our proposed framework

Build Your Own World – CS61B Course Project University of California, Berkeley Jun 2

Jun 2025 – Aug 2025

- Built a 2D maze game with features of saving and loading game states using Java visualization library
- Applied principles of software engineering through modularizing game components including avatar, ghosts and treasures
- Implemented heuristic search (A\* algorithm) for the avatar to find the shortest path automatically

Creating RISC-V CPU - CS61C Course Project University of California, Berkeley

Jun 2025 - Aug 2025

- Used Logisim, a visual hardware simulator to design a 2-stage pipelined CPU
- Analyzed the mapping between machine code and ISA using Excel
- Built CPU components (control unit, ALU, instruction memory, register files) from elementary logic gates
- Handled control hazard through smart branch prediction

**Exploring AI techniques in 3D model generation** University of Nottingham

Mar 2025 - Jun 2025

- Explored over 20 3D generative models under the supervision of Boon-Jiin Lee
- Created a simulation of two animated characters playing together using Mixamao and Unity
- Wrote a report comparing and contrasting the performance of different 3D generation models (Meschy, Tripo, etc.)

### Leader of machine learning project University of Oxford

Aug 2024 - Sept 2024

- Took the course **Advanced Topics in Statistical Machine Learning**, offered by Tom Rainforth
- Applied Vision Transformer to dog breed classification over 240 dog classes, here is the link to the project
- Capable of using PyTorch to build models and Latex to write reports
- Won the outstanding team award in model performance (the third place among 20 teams) and report writing (Award prize 100 £)

Artificial Intelligence Tutor Chinese Industrial Design Museum, Shanghai

Jun 2024 - Aug 2024

- Taught machine learning (decision tree, convolutional neural network) concepts for 20 elementary school students.
- Designed learning material, available at **github.com/GuqiaoLiang/Allen-s-magical-world**.
- Helped students design electronic clock using Arduino

# **Social Experience**

# **Nottingham British Parliamentary Debate Group Coordinator**

Sept 2024 - Jun 2025

- Organized 10 weekly debates, working as the judgment evaluating player's performance and providing analytical feedback to them
- Instructed new members on the basic knowledge of British parliamentary debate to help them succeed in competition

Freshman Peer Mentor Sept 2023 - Oct 2023

- Designed and facilitated ice-breaking activities for 10 incoming freshmen during Orientation Week
- Provided proactive mental health support through online conversation and personality forms

## **Skills**

Languages: Java, Python, C++, C, Matlab, SQL, RISC-V, MIPS, Haskell

Developing tools: Github, Gitlab, Intelli, VsCode, Unity

Moocs taken: Machine Learning Specialization, Data Structure in Coursera