# Hongyi Tu

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# **EDUCATION**

# King's College London

London, United Kingdom

Bachelor of Science in Computer Science

Jan. 2022 - May 2025

- Relevant coursework: Data Structures and Algorithms, Software Engineering, Database Systems

# EXPERIENCE

#### Undergraduate Research Assistant

June 2023 – September 2023

King's College London

London

- Developed a new feature for COVID-19 statistics using Java, JavaFX, and XML
- Implemented UI elements using XML and Material Design components
- Collaborated with team members on software design and implementation strategies
- Practiced agile development methodologies within a team environment

## Internship certificate of completion

June 2023 – September 2023

Talent Science And Technology Co., Ltd.

NanJing, China

- Primarily responsible for building and maintaining the full stack of government water conservancy business project
- For back end, take charge of providing interface code for testing to the front end team
- Collaborated with team members for CRUD operations to transfer data among the Springboot framework

# Group Project Developer

Nov 2023 - Jun 2024

King's College London

London

- Developed a web application using Django, JavaScript, Python, HTML5, and Bootstrap
- Collaborated with team members on wireframe designs and project management
- Deployed the application using Pythonanywhere and performed comprehensive testing
- Organised the weekly meeting for tracking the progression for each group members via using accountability skills

#### Projects

#### COVID-19 Real-time Data Analysis App | JavaFX

March 2023 – April 2023

- Developed application interface and data analysis processing using Java
- Integrated GitHub for data retrieval from user repositories
- Designed front-end interface for real-time COVID-19 statistics in London
- Used web api to visualize the data model from NHS website

# Crimson PDF Voice Recogizer | Django, Python

March 2024 - April 2024

- A website mainly build for PHD student and their supervisor
- User can upload their PDF file and then utilize for PDF marking
- Create group and share the PDF with other users
- Designed front-end interface for real-time COVID-19 statistics in London
- user can choose to make comment via either text or voice
- System can transcribe it from voice to subtitle for the accessibility
- Used Adobe Embed API for the performance of rendering PDF documents

#### Project Management Board Website | Django

March 2023 – April 2023

- Managed GitHub repository and application deployment
- Created a Trello-like board for team task management using Django
- Facilitated agile development practices and maintained unit tests

# Sudoku Solver $\mid C++$

March 2024 – April 2024

- Pure C++ Program
- Rapid provision of solution to the Sudoku in two dimensional array

- High performance in low time and space complexity

# Web crawler | Python

June 2022 – April 2022

- Crawling images from websites using crawler technology for the preparation of dataset for training models in AI deep learning
- High performance
- Automatically filter appropriate content
- Long-term support

# TECHNICAL SKILLS

Master Languages: Java, Python, C++, MySQL, SQLite, JavaScript, Scala

Frameworks: Django, Vue2, React, Springboot

Developer Tools: Git, Docker, VS Code, Visual Studio, PyCharm, IntelliJ, AWS EC2, S3, LaTex