# Zixi Wang

79 Queens Gate, London SW7 5JU Email: zixi.wang21@imperial.ac.uk

Website: <a href="https://www.doc.ic.ac.uk/~zw4021/">https://www.doc.ic.ac.uk/~zw4021/</a>

Tel: +44 7536121661

### **EDUCATION**

#### **MEng Computing - Imperial College London**

Oct 2021 - Jul 2025 (present)

 Modules include: Haskell, Java, Kotlin, C, Databases, Linear Algebra, Discrete Math, Computer Architecture, Operating System, Software Engineering, Algorithm Design, Compilers, Networks and Communications

#### A-levels - CATS College London

Sep 2019 - Jun 2021

Physics(A), Mathematics(A\*), Further Mathematics(A\*)

### **RELEVANT PROJECTS**

### Design for Real People - Imperial College London

May - Jun 2023

- Worked in a team of four people to target and solve a real-world problem.
- Interviewed and researched different fields, and chose the problem statement 'How might we
  assist young adults in effectively tracking the expiration date of items they consider important'.
- Developed an creative Android app that allowed users to log in items with expiration dates, and customize the notifications, with embedded chatting system to share/request items.
- Learned and applied new knowledge including Kotlin, Firebase and SQLite.
- Obtained skills including human centered design methods, video filming, presentation, report writing through elevator pitch, weekly presentations, prototyping and iterations.

### **WACC Compiler - Imperial College London**

Jan - Mar 2023

- Worked in a team of four people to write a compiler from scratch.
- Designed and implemented syntactic analysis, semantic analysis in the front end, and revisiting AST and symbol table to generate assembly in the back end.
- Learned and applied knowledge including new language Scala, and concepts of compilers,
   DevOps and CICD.
- Took responsibility for organizing and scheduling regular meetings.

# PintOS - Imperial College London

Oct - Dec 2022

- Worked in a team of four people on a simple operating system framework for 80×86 architecture that supports kernel threads, user programs and a file system.
- Enhanced features of the OS framework by implementing priority scheduling, user programs and adding a virtual memory implementation, using C language and OS concepts.
- Obtained comprehensive understanding of operating system, including threads, concurrency, virtual memory, file system and data structure design.
- Collaborated with teammates to split the project into individual tasks, and set clear goals and deadlines to ensure timely completion of project milestones.

 Noted down meeting minutes that documented discussions, decisions, and action items, facilitating progress tracking.

# **WORK EXPERIENCE**

#### Software Developer Intern - Bank of America, UK

Jun - Aug 2023

- Worked in a team of six software engineers to develop an algo control application for traders.
- Improved the smoke testing efficiency by 98.06% through automating the testing by developing an intuitive dashboard to show real-time feedback using TypeScript and React.
- Managed to do a stretch task of ensuring data synchronization among services by adding a GraphQL endpoint to the server code for AMPS checks, using Java, GraphQL and Spring.
- Presented the developed monitoring dashboard to different teams under same division globally through a 15min presentation.
- Communication skills and teamwork skills enhanced through daily team scrums, sprint checks, retrospective and networking events.
- Participated in a machine learning code challenge in a team of seven to investigate and predict relationship between trades and readership, learned about basic concepts of ML.

## **EXTRACURRICULAR**

## Orchestral Manager - Imperial College London String Ensemble

Sep 2023 - present

- Responsible for booking weekly rehearsal rooms and concert halls for the concert each term.
- Collaborated with other committee members to arrange events for the society.
- Attended weekly rehearsals as a violin player since Oct 2021.

#### **Active Member - Imperial College London Sinfonietta**

Oct 2021 - present

- Attended weekly rehearsals as a violin player.
- Participated in the concert each term.

## **IT SKILLS**

- Preferred programming languages: Java, Python
- Skilled in Kotlin, C, Scala, JavaScript, Html/CSS, MySQL, PostgreSQL
- Experience with React, Spring frameworks, Win/Mac/Linux environments

# **LANGUAGE SKILLS**

- Native speaker of Chinese(Mandarin)
- Fluent English

# **RESEARCH INTERESTS**

- System design considerations and trade-offs when choosing different design patterns
- Security concerns related to AI/ML skills, including phishing and hacking