Anderson Zihao You

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EDUCATION

University of Dundee

Dundee, Scotland

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Doctor of Philosophy - Computing

Sep 2023 - Present

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Mobile:

Research Title: Making more accessible subtitles for People with Aphasia

King's College London

London, England

Master in Science (Hons) - Computer Science; Grade: 2:1

Sep 2019 - Aug 2023

Courses: Programming Practice and Applications, Foundations of Computing I and II, Data Structures, Database Systems, Practical Experiences of Programming, Operating Systems and Concurrency, Robotics Group Project, Artificial Intelligence Reasoning and Decision Making, Cryptography, Human-Computer Interaction, Network Security, Machine Learning, Agents and Multi-Agent Systems, Security Engineering, Data Mining, Simulation and Data Visualisation

Cardiff Sixth Form College

Cardiff, Wales

A-levels; Grade: A *A *A *

Sep 2017 - Aug 2019

Courses: Mathematics, Further Mathematics, Physics

SKILLS SUMMARY

• Programming Languages: Assembly Language, Java, C, C++, Scala, Python, JavaScript, React Native, HTML, CSS

• Frameworks: Scikit-learn, Node.js

• Tools: Microsoft Office, GitHub, MATLAB, Visual Studio Code, LaTeX, Anaconda, Miro, Figma

Platforms: macOS, Linux, Windows, Arduino, Ultraleap
 Languages: English (fluent), Mandarin Chinese (native)

• Soft Skills: Research, Report Writing, Networking, Time Management, Learning from Mistakes

EXPERIENCE

King's College London

London, England

Undergraduate Research Fellowship - supervised by Dr. Timothy Neate (Full-time)

Jun 2022 - Sep 2022

- **Project Relaunch**: Picked up the in-person work that had been abandoned by a former PhD student (Dr. Sergio Alvares R. de S. Maffra) since the pandemic.
- More than expected achievements: Carried out 27 (35% above the expected number) two-part user studies exploring the feasibility of feedforward interactions by giving users some indications of the result before they responded.
- Further Commitments: Performed a series of further analyses based upon collected participants' data including the Chi-Square Test, performance codification and subjective experience quantification that contributed to a research paper.
- **Network Expansion**: Built strong connections with people both inside and outside the research discipline via utilising the existing workplace and chances of recruiting prospective participants to the study.

Bright Network

Remote

Internship Experience UK 2021 - Technology (Part-time)

Jun 2021 - Jul 2021

- Aim: Created proposals and solutions for a technology consulting project on EY.
- Objective 1: Effectively forecast desk bookings and allocations.
- Objective 2: Ensured personal data relating to desk bookings (e.g. name, address, employee ID etc.) was stored securely.
- Objective 3: Assessed the tools available in the market to generate reports and dashboards for Senior Leadership in order to monitor capacity and identify trends.
- **Objective 4**: Monitored the flow of people within the office and had an alert mechanism in place if social distancing could not be observed.

UltraBloom Limited

Remote

Software Developer (Part-time)

Feb 2021 - Apr 2021

- New Programming Languages' Acquirement: Learned some basic JavaScript and React Native techniques from scratch.
- Front end development: Took charge of the front end and built the login page and sign-up page for the company users using React Native.

AWARDS AND CERTIFICATIONS

- 2023 ACM SIGCHI Best Paper Award April, 2023
- King's Experience Research Award December, 2022
- Engineering Virtual Program at Goldman Sachs August, 2021
- Internship Experience UK 2021 Technology at Bright Network July, 2021
- Microsoft Learn Student Ambassador March, 2021
- Professional Skills For A Globalised World at King's College London November, 2019

• Smarter Recycling Service Platform (Information Visualisation, Human-Computer Interaction, Machine Learning): (Grade: 76)

Worked in a team of 6 and built a web app that helps boost the recycling rate in the London Borough of Hounslow via enhancing the current content visualisation on the council's website. Personal contribution includes conducting background research on the context given by Challenge Sponsors, extracting and summarising information on recycling services and fun facts that appeared across the council's website, which has been used as content being inserted into the application, as well as running 4 user studies that evaluate the project's usability and end-user experience.

Tech: Microsoft Office, Microsoft Teams, Miro, LaTeX

(Nov '22 - Mar '23)

• Discreet Approaches to AAC: A Teleprompter that assists people with difficulty in public speaking (Human-Computer Interaction, Accessibility, Natural Language Processing): (Supervisor: Dr. Timothy Neate, Grade: 71)

A 3rd-year individual research-oriented project that lies at the intersection of HCI and NLP using methodologies such as Sketching/Prototyping, Interviewing and Usability Testing, also contributed to a PhD student's (Mr. Humphrey Curtis) research paper.

Tech: Python, Tkinter, Anaconda, Visual Studio Code, Miro, LaTeX, Microsoft Office

(Oct '21 - Apr '22)

• Human-Fitness Interaction: Group Coursework (Human-Computer Interaction, User-Centered Design): (Grade: 81)

Worked in a team of 5 and built an app that balances students' work and leisure. Personal contribution includes taking detailed notes from the lecturer's verbal feedback, generating and verifying 9 key assumptions that have been used to test against as well as establishing a "concentration enforcement tool" that forms part of the prototype's functionality.

Tech: Microsoft Office, Miro, Figma, LaTeX, GoodNotes

(Oct '21 - Jan '22)

• Human-Fitness Interaction: Individual Coursework (Human-Computer Interaction, Field Experimental Study): (Grade: 83)

Proposed a controlled experiment investigating "students' age - time management skills correlation", which evaluates beyond the scope of the system designed in group coursework.

Tech: Microsoft Office, LaTeX

(Jan '22)

• Robotics Group Project (Line Following, Obstacle Avoidance, Bayesian Localisation, A* Planning): (Grade: 79) Worked in a team of 3 and successfully completed 4 consecutive challenges. Personal contribution includes liaising with TAs via passing any question teammates had throughout the period, collecting data from Open Loop Localisation Error Analysis, code commenting as well as report proofreading.

Tech: Ubuntu, ROS, Gazebo, Python, Anaconda, Microsoft Office, LaTeX

(Sep '20 - Apr '21)

• Smart Contracts Security (Blockchain, Cryptocurrency, Cyber Security, Ethereum): (Grade: 77.5)
Worked in a team of 6 and conducted research about potential security threats and mitigations to Smart Contracts. Personal contribution includes delivering a presentation on a specific Blockchain use case Ethereum by focusing on the programming language used and the platform.

Tech: Microsoft Office, Microsoft Teams

(Mar '21 - Apr '21)

PUBLICATIONS

• INTERACT '23: 19th International Conference of Technical Committee 13 (Human-Computer Interaction) (INTERACT) Springer:

Using Mid-Air Haptics to Guide Mid-Air Interactions (Mid-air haptics, Guidance, Gesture, Mid-air interfaces):

Other co-authors: Timothy Neate, Sergio Alvares Maffra, William Frier, Stephanie Wilson

(June '23)

• CHI '23: Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems: Envisioning the (In)Visibility of Discreet and Wearable AAC Devices (Alternative and Augmentative Communication, Accessibility, Discreet and Wearable Devices, Focus Groups):

Other co-authors: Humphrey Curtis, William Deary, Miruna-Ioana Tudoreanu, Timothy Neate

(April '23)

Volunteer Experience

KCL Robotics Society

Committee Member

London, England

Sep 2020 - Apr 2021

- Workshop Running: Ran a 2-hour workshop session based on buzzers using Arduino, successfully delivered two base tasks and a challenge task to people by using my existing programming knowledge.
- Events Promotion: Helped the society promote events on various social media, as well as reaching out to societies both inside and outside my university for collaboration. This caused a big turnout in one of the major events, with approximately 190 attendees.

Scope

Cardiff, Wales

Help the manager sort donations and arrange displays in a charity shop.

Nov 2017 - May 2018

Oxfam Cardiff, Wales

Worked behind the till, took payment, gave change and checked the accuracy of the till roll.

Sep 2017 - Oct 2017

Additional Information

- Got selected out of 10,000 applicants for the 2021 Summer Virtual Insight Series program at Goldman Sachs, which focused on perfecting resume, learning about various roles and divisions, reviewing interview best practices, and networking with professionals from across the firm.
- Presented an ongoing DCEP (Digital Currency Electronic Payment) project of my country in KCL Blockchain, focusing on the market size, feasibility (including project pilot tests as an example), problem and solution.
- Won second place out of 15 teams in the first-year hackathon held by KCL Tech Society, worked with a group of 4 people on a project based on the description of different types of pollution and how to deal with them, cooperated with a team member to create a data set using Microsoft Excel.
- Took part in a school visit to a local Tech company in 2018 and saw the sort of work they were involved in, built a vehicle and then programmed it using Python with two team members.