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Education

PhD in Healthcare through Human-Computer Interaction, <i>University of Edinburgh</i> Thesis: Public Perception of Polygenic Risk Scores (PRS) in the United Kingdom <i>Supervised by Prof Albert Tenesa and Prof John Vines</i> <ul style="list-style-type: none">— PRS determines a person's relative risk of developing a particular disease by comparing massive volumes of genetic data from cohorts with and without the disease. It has not been utilised widely due to a series of barriers.— Using design-driven qualitative and quantitative research methods, I aim to demystify the term PRS and identify those barriers that limit the public use of PRS in the UK, with the goal of exploring public-responsive PRS services.	Current Study	2021-2024
MRes in Medical Robotics and Image-Guided Intervention, <i>Imperial College London</i> Thesis: Microrobots for Precision Medicine (79%) - Distinction awarded Magnetic Hyperthermia injects magnetic nanoparticles (MNPs) <i>in vivo</i> , to damage and kill the cancer cells by heating MNPs up to the target temperature, with two novel setups.		2020-2021
BSc (Hons) in Computer Science, <i>University of Liverpool & Xi'an Jiaotong-Liverpool University</i> Thesis: Predict the Impact of Visual Distortion on Medical Images (75%) - Strong Upper Second Class awarded Two "generally acknowledged" algorithms were proved as poor performances in the medical imaging area for the first time, by collaborating externally with clinicians and radiologists.		2016-2020

Experience

Teaching Assistant in Design Informatics, <i>University of Edinburgh</i> I have successfully taught a total of 7 diverse courses across fields including computer science, health and social care, with a particular emphasis on subjects of human-computer interaction. Drawing from my interdisciplinary background, I present information in an engaging manner. I am deeply passionate about leveraging various learning technologies to ensure inclusivity and accessibility for all students in my classes.	Current Role	Since 2022
Product Manager Intern in Applied Artificial Intelligence, <i>Ping An Technology</i> Focused on a new platform called Occam, which is powered by AutoML algorithms and provides SaaS and PaaS to AI-related companies. My work specifically involved the convergence of competitive analysis, customer retention, and product marketing.		2020
Co-founder for Inclusion Club, <i>Xi'an Jiaotong-Liverpool University</i> Based on the concept of 'inclusion' that everyone, including individuals with disabilities or other disadvantages, should be able to utilise the same facilities, participate in the same activities, and have the same experiences. I was in charge of the flagship project <i>Accessible Map @ Suzhou</i> and independently led a team of 20.		2019-2020

Grants, Honours, & Awards

The Genetics Society Conference Grant (£750)		2024
Birrell-Gray Travelling Scholarship (£500)		2024
The Genetics Society Public Engagement Grant (£776)		2024
Population Genetics Group 57 Conference Bursary (£300)		2024
PhD Student of the Year Award, University of Edinburgh (shortlisted)		2023
Redwood Academy PhD Open Class Competition Second Runner-up (£400)		2023
The Genetics Society Communicating Your Science Workshop Grant		2023
The Genetics Society Conference Grant (£220)		2022
University of Edinburgh & China Scholarship Council PhD Scholarship (£126,000)	Current Grant	2021-2024
Hong Kong Polytechnic University Presidential PhD Fellowship (~£112,000, awarded with declination)		2021
Hamlyn Centre MRes Studentship (£6,000)		2020-2021
University of Liverpool International Summer School Scholarship (£1,500)		2019
University Academic Achievement Award (10%) x 2		2017-2019
University Outstanding Student (3%) x 4		2017-2020

Accreditation & Certification

Associate Fellowship of Higher Education Academy (AFHEA)		2024
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Services

Student Volunteer, <i>Information+ Conference 2023</i>	2023
Global Buddies Group Leader, <i>University of Edinburgh</i>	Since 2022
Staff-Student Liaison Committee, <i>University of Edinburgh</i>	Since 2022
PhD Student Organising Committee, <i>Scottish Informatics and Computer Science Alliance Conference 2022</i>	2022
Student Volunteer, <i>ACM Intelligent User Interfaces Conference 2022</i>	2022
Imperial Alumni Student Recruitment Ambassador, <i>Imperial College London</i>	Since 2022
Youth Committee, <i>International Chinese Association of Computer Human Interaction</i>	2020-2022
Student Representative (cohort), <i>Imperial College London</i>	2020-2021
Students with Disabilities 'Welfare Officer', <i>Imperial College London</i>	2020-2021
Student Representative, <i>Xi'an Jiaotong-Liverpool University</i>	2017-2018

Current Role

Skills

Transferrable Skills

Research Design, Interdisciplinary Research, Human-Centred Research, Public Presentation, Risk Assessment, Public Engagement, Leadership, Time Management, Ethics & Sustainability, Teaching & Tutoring, Design Thinking & Methods, Critical Thinking

Languages

Mandarin Chinese (native), English (advanced), Cantonese Chinese (intermediate), Spanish (elementary)

Computer Languages

MATLAB, HTML5, CSS3, JavaScript, OpenGL, Java, Python, R, C+, LaTeX, MySQL, C#, Arduino, Prolog, Assembly

Technical Tools

Unity, Visual Paradigm, Axure, Visual Basic, COMSOL Multiphysics, Adobe (XD, Dreamweaver, Photoshop), Microsoft Office (Access, Word, PowerPoint, Excel)

Not an exhaustive list.

Publications

I am dedicated to translating my research into written publications to share knowledge broadly and inspire others. My work has been well-received, with **34 citations** from fellow researchers in the field, showcasing its impact and relevance. The complete list of my publications can be accessed on my [Google Scholar](#) profile. Additionally, full texts of my research papers are available for review on my [ResearchGate](#) page.

Highlighted below are select publications from my body of work.

Journal Articles

Yuhao Sun and Gabriela Mogos. 2022. Predict the Impact of Visual Distortion on Medical Images. *IAENG International Journal of Computer Science* 49, 1 (2022), 36-45.

Yuhao Sun and Gabriela Mogos. 2020. Data Analysis of Medical Images. *International Journal of Design, Analysis and Tools for Integrated Circuits and Systems* 9, 1 (2020), 37-40.

Peer-Reviewed Conference Papers

Yuhao Sun. 2024. Design for Debate: Exploring Public Perceptions of an Emerging Genetics Health Prediction Service 'Polygenic Risk Score' Through Design Methods. In *Designing Interactive Systems Conference (DIS Companion '24), July 01–05, 2024, IT University of Copenhagen, Denmark*. ACM, New York, NY, USA, 4 pages. <https://doi.org/10.1145/3656156.3665137>.

Yuhao Sun, Yamei Zhao, and Junsheng Sun. 2022. Computer-Aided Atrial Fibrillation Diagnosis System with The Naive Bayesian Network: Based on The Analysis of 2016 Actual Cases of Electrocardiography Signals. In *2022 2nd International Conference on Consumer Electronics and Computer Engineering (ICCECE)*. IEEE, 945–950

Yuhao Sun, Yamei Zhao, and Junsheng Sun. 2020. Subjective Image Quality Assessment: A Pre-Assessment on Visual Distortion of Medical Images by Clinicians and Radiologists. In *2020 7th International Conference on Information Science and Control Engineering (ICISCE)*. IEEE, 1367–1370

Weihua Gao, **Yuhao Sun**, Qingying Fu, Zhouzhe Wu, Xiao Ma, Kai Zheng, and Xin Huang. 2018. ARP poisoning prevention in Internet of Things. In *2018 9th International Conference on Information Technology in Medicine and Education (ITME)*. IEEE, 733–736.

Oral Presentations

Yuhao Sun. Visual Distortion on Medical Images: NR-IQA Evaluator in CT Scans. *Video Quality Experts Group (VQEG) Spring 2022 Meeting*. INSA Rennes (Rennes, France).

Yuhao Sun. Subjective Image Quality Assessment: A Pre-Assessment on Visual Distortion of Medical Images by Clinicians and Radiologists. *2020 7th International Conference on Information Science and Control Engineering (ICISCE)*. Changsha, China.

Yuhao Sun. Data Analysis of Medical Images. *2020 International Conference on Recent Advancements in Computing in AI, IoT and Computer Engineering Technology (CICET)*. Tamkang University (Taipei, Taiwan).

References are available upon request.