Shuoyang Jasper Zheng BSc(Hons) MSc, AFHEA

LinkedIn - GitHub - GoogleScholar
https://jasperzheng.cc/

CV - Sep 2025
London, UK
Email: shuoyang.zheng@qmul.ac.uk

My academic interests has a focus on Explainable AI, Human-Computer Interaction, Creative Computing, and Software Engineering.

EDUCATION

Queen Mary University of London   **London, UK**
PhD in Artificial Intelligence and Music Technology   Sep. 2023 - Present

   Topic: Explainability of Neural Audio Synthesis, Supervisor: Dr. Anna Xambó Sedó and Prof. Nick Bryan-Kinns

University of the Arts London - Creative Computing Institute   **London, UK**
MSc Computing and Creative Industry (Distinction)   Sep. 2021 - Dec. 2022

University of Liverpool   **Liverpool, UK**
BSc (Hons) Computer Science (First Class)   Sep. 2018 - July. 2021

EXPERIENCE

UAL Creative Computing Institute   **London, UK**
Module Leader   Jan. 2023 - Present

- Module: (2024/25, 2025/26) [BSc (Hons) level-4] *Mathematics and Statistics for Data Science* - Duties: preparation, delivery, assessment.

Associate Lecturer

- Module: (2022/23, 2023/24, 2024/25) [MSc level-7] *Exploring Machine Intelligence* - Duties: preparation, delivery, assessment.
- Short course: (2022, 2023) [MA/MSc level-7] *C++ Programming* (a three-week short course) - Duties: preparation, delivery.

Guest Lecturer

- Module: (2024/25) [MSc level-7] *Artificial Intelligence and Machine Learning* - Duties: preparation and delivery.
- Module: (2024/25) [BSc (Hons) level-4] *Digital Systems* - Duties: preparation and delivery.
- Module: (2022/23) [MSc level-7] *Critical Studies: Computational Thinking* - Duties: preparation and delivery.

Beijing Founder Electronics Co. - UI/UX Department   **Beijing, China**
Front-End Developer (internship)   Jun - Sep. 2020

   Duties: Developing web application with modern *Javascript* frameworks (*React.js, Vue.js, Node. js*)

Summer Research Fellowship - Xi'an Jiaotong-Liverpool University   **Suzhou, China**
Research Assistant   May. 2018 - Jan. 2019

   Duties: Conducting *user-centred research*, developing software prototypes.

JOURNAL PUBLICATION

- **S. Zheng**, N. Bryan-Kinn, A. Xambó Sedó, *Gestural Affordances in AI Audio Latent Space*. Frontiers in Computer Science, Sep. 2025. [pdf]

CONFERENCE PROCEEDINGS

- N. Bryan-Kinns, **S. Zheng**, F. Castro, M. Lewis, JR. Chang, G. Vigliensoni, T. Broad, M. Clemens, E. Wilson, *XAIxArts Manifesto: Explainable AI for the Arts*. In EA of the CHI Conference on Human Factors in Computing Systems (CHI EA '25). Japan, Apr. 2025. [pdf]

- C. Saitis, BM. Del Sette, J. Shier, H. Tian, **S. Zheng**, S. Skach, CN. Reed, C. Ford, *Timbre Tools: Ethnographic Perspectives on Timbre and Sonic Cultures in Hackathon Designs*. In Proceedings of the 19th ACM International Audio Mostly Conference, Milan, Italy, Sep. 2024. [pdf]

- **S. Zheng**, BM. Del Sette, C. Saitis, A. Xambó, N. Bryan-Kinns, *Building sketch-to-sound mapping with unsupervised feature extraction and interactive machine learning*. In Proceedings of the International Conference on New Interfaces for Musical Expression (NIME), Utrecht, Netherlands, Sep. 2024. [pdf]

PROFESSIONAL ACTIVITIES

- **Volunteer Coordinator**, 2025 AES International Conference on AI and ML for Audio   Sep. 2025, **London, UK**
- **Undergraduate Research Chair**, the 17th ACM Conference on Creativity & Cognition (C&C '25)   Jun. 2025, **Online**
- **Facilitator**, Responsible AI and Music Workshop [EP/Y009800/1] at UAL Creative Computing Institute   Jul. 2024, **London, UK**
- **Organising Committee**, the 2nd International Workshop on Explainable AI for the Arts at C&C '24   Jun. 2024, **Chicago, IL, USA**
- **Staff Member**, the 1st AHRC Sensing the Forest Summer School [AH/X011585/1]   Jun. 2024, **Farnham, UK**
- **Organising Team**, Workshop on Marginalized Music Genres and AI Music Generation at   Feb. 2024, **Beijing, China**
  Central Conservatory of Music, China
- **Technical Program Committee**, International Conference on Algorithm, Image Processing and   Sep. 2023, **Qingdao, China**
  Machine Vision (AIPMV '23)

WORKSHOP PAPERS / DEMOS

- H. Tian, **S. Zheng**, S. Lattner, M. Lagrange, C. Saitis, *Agentic Max/MSP Programming with LLMs and MCP*. In Extended Abstracts for the Late-Breaking Demo Session of the 26th Int. Society for Music Information Retrieval Conf., Daejeon, South Korea, 2025 [pdf].

- C. Saitis, BM. Del Sette, J. Shier, H. Tian, **S. Zheng**, S. Skach, CN. Reed, C. Ford, *Ethnographic Exploration of Timbre in Hackathon Designs*. CHIME Annual Music and HCI Conference 2024. Milton Keynes, UK, Dec. 2024

- N. Bryan-Kinns, C. Ford, **S. Zheng**, H. Kennedy, A. Chamberlain, M. Lewis, D. Hemment, Z. Li, Q. Wu, L. Xiao, G. Xia, J. Rezwana, M. Clemens, and G. Vigliensoni. *Explainable AI for the Arts 2 - XAIxArts2*. In Proceedings of the 16th ACM Conference on Creativity and Cognition (C&C) Chicago, IL, USA, Jun. 2024. [pdf]

- **S. Zheng**, A. Xambó, N. Bryan-Kinns, *A mapping strategy for interacting with latent audio synthesis using artistic materials*. In Proceedings of Explainable AI for the Arts Workshop 2024 (XAIxArts 2024). Chicago, IL, USA, Jun. 2024 [pdf]

- **S. Zheng**, M. Grierson, (2023) *StyleGAN-Canvas: Augmenting StyleGAN3 for real-time human-AI co-creation*. In Joint Proceedings of the ACM Intelligent User Interfaces Workshop (IUI), Sydney, Australia, Mar. 2023. [pdf]

SELECTED TALKS, EXHIBITIONS, AND PERFORMANCES

- Sónar+D 2025, Project Area.   June. 2025, **Barcelona, Spain**
- IRCAM Forum Workshops 2025.   Mar. 2025, **Paris, France**
- Queen Mary Music Festival 2025.   Mar. 2025, **London, UK**

EDITORSHIPS

- N. Bryan-Kinns, C. Ford, **S. Zheng**, et al. (Eds.) (2024). Proceedings of The second international workshop on eXplainable AI for the Arts (XAIxArts). arXiv:2406.14485. [online]

REVIEWING

- [2024, 2025] (PC member) International Workshop on Explainable AI for the Arts.

- [2025] (PC member) 2025 AES International Conference on AI and ML for Audio.

- [2025] (Guest reviewer) International Journal of Performance Arts and Digital Media.

MEMBERSHIPS

- Associate Fellow of the Higher Education Academy (AFHEA) - Ref: PR316557.

PROJECT SUPERVISION (AS PRIMARY SUPERVISOR)

- **MSc Project Supervisor**, Postgraduate thesis supervisor: 10 in total (6 in 2022/23; 4 in 2023/24)
- **MA Project Supervisor**, Postgraduate thesis supervisor: 1 in total (1 in 2023/24)

FUNDING AND SCHOLARSHIPS

- PhD studentship from the UKRI Centre for Doctoral Training in Artificial Intelligence and Music [EP/S022694/1], 2023 - 2028.

AWARDS

- **World Finalists - RESHAPE 18 | SENSING MATERIALITIES**   **Barcelona, Spain**
Entered the top 10 world finalists of RESHAPE 18 product design category.   Oct. 2018
- **IT Category Winner - Summer Undergraduate Research Fellowship (SURF) programme**   **Suzhou, China**
Awarded the 1st prize in the information technology category with a research project on smart textiles.   Aug. 2018

THESIS

Real-time Interface for Human-AI Interaction - Masters Thesis   **London, UK**
Developed a high performance framework for real-time generative AI, aims to facilitate the human-AI image co-creative applications. Supervised by Prof. Mick Grierson.   May - Dec. 2022

Sending and Receiving Data using Audible Sound - Undergraduate Thesis   **Liverpool, UK**
Developed a data-over-sound protocol for low power IoT systems using techniques in digital signal processing. Supervised by Dr. Thomas Carroll.   Oct. 2020 - May. 2021

SKILLS

Languages	**Python** (6 years' experience) - computer vision, generative machine learning, DSP **C++** (4 years' experience, 1 years' teaching experience) **Front-End Development** (7 years' experience) - Javascript, Vue.js **iOS Development** - Swift and Objective-C - portfolio >> **LaTeX** (3 years' experience)

Frameworks	**ML Frameworks** (5 years' experience, 3 years' teaching experience) - PyTorch, TensorFlow **Web Development** (3 year's experience, <u>web portfolio</u>) - Django, Flask, Socket.IO, WebSocket. **3D Maths/Geometry Game Engines -** Unity, p5.js, three.js
Sound&Music	**DAWs** - Ableton Live, Logic Pro **Audio Programming** (2 years' experience) - Max MSP **Sound Engineering** (4 years' amateur-level experience) - studio recording, sound design and synthesis **Music Composition and Production** - <u>SoundCloud portfolio >></u>
Other Creative Tools	**Microcontrollers for Physical Computing -** Arduino, ESP32 **Cinema 4D & Octane Render** - (portfolio on request) **Adobe Creative Suite -** graphic design (portfolio on request) **Photography** (self-taught) - camera skills (still and moving), lighting, and digital post-production (portfolio on request)