Yang Chen

Digital Arts & Humanities • Research Software Engineering





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Education



King's College London

MA Digital Humanities

2024 - Present

2022 - 2023

2017 - 2021

Key Courses

Computational and Corpus Linguistics, Communicating and Preservation of Cultural Heritage, Digital Curating, Video Game Studies

- Digital History Platform | Research Center for Digital Humanities of Peking University Developed an LLM-assisted system for extracting <u>cultural ontologies & relationships</u> from classical Chinese biographical texts, enabling real-time RAG Q&A and GIS visualization
- Accepted Paper in Digital Narratology | Chinese Digital Humanities Conference 2024 "Intelligent-Narrative Symbiosis: AI and LLMs in Digital Storytelling", (In Chinese) explored technical-narrative collaboration frameworks in AI-enhanced digital storytelling, with focus on system evolution and interaction patterns
- Research Guide Digitization & Translation Crowdsourcing | KCL Archive Designing standardized <u>Dublin-Core based metadata</u> schema and digital catalog infrastructure for WWI research guides with crowdsourcing translation and interactive timeline

Royal College of Art

MA Digital Direction

- Fuzzy Graph Network-based Medical Decision Support System | ICBS Innovation Lab Developed graph-based clinical decision support system using graph database and NLP for medical guideline digitization, transformed complex NHS and BNF medical guidelines into interactive flowcharts
- VR Crowd Flow Analysis | Imperial College Centre for Transport Engineering & Modeling Developed 3D modeling and server monitoring using ViRSE VR framework and Unreal Engine, supporting real-time high-precision data collection for 100 online users
- Parametric Generative VR Narrative Space | Centre Pompidou IRCAM Project Exhibition Developed dynamic world generation using Houdini Engine for UE, implementing physics collision systems, with real-time LLM and MetaSound spatial audio dialogue generation



Beijing University of Posts and Telecommunications

BSc in Software Engineering

Key Courses

Java (SE/EE), Computer Networks & Web Services, Python, Data Mining, Software Engineering, OOP Design, Data Structures & Algorithms, Database Design, Mobile App Dev, HCI

- Xiaoyi River Real-time Visualisation Platform | Beijing Key Lab of ITSoftware and Multimedia Integrated multiple real-time sensors and physical simulation systems to design and implement full-basin water quality monitoring visualization dashboard
- > Tencent User Lifecycle Analysis | Institute of Automation, Chinese Academy of Sciences Integrated graph structures and sequence features for game player user relationship extraction, data analysis, and visualization, joint project with Microsoft Research Asia

Thesis

Classical Music Generation Using LSTM with Embedded Music Theory Knowledge

Skills

Data Science Development PyTorch TensorFlow Pandas Data Visualization JavaScript TypeScript React Vue Node.js Python Django HTML/CSS **Machine Learning Interaction Design Tools** Unreal Engine Unity Three.js TEI/XML SPARQL Docker CI/CD Git After Effects TouchDesigner Kubernetes RESTful API SQL

Experience

University of

Science and Technology of China **Artificial Intelligence Research Institute**

Full Stack Development Intern

Designed and implemented differential privacy-based Q&A knowledge base and P2P computing platform, with BERTopic knowledge classification & GPT Embeddings vector RAG search.

Implemented real-time synchronization of million-scale messages using SQL triggers, deployed container autoscaling and DevOps pipeline.

LLM Elasticsearch GCP/AWS Kubernetes PostgreSQL

Tencent Tencent

2020 - 2021

2022 - 2024

Frontend Development Intern

Customized visualization component library for WeChat and Tencent News content management system, supporting article editing and caching for 247M monthly active app users.

React ECharts.js Node.js

Face++ Megvii Research

2018 - 2019

Interactive Game Development Intern

Developed a Street Fighter style H5 fighting game using camera-based human skeleton recognition framework for real-time motion capture.

Three.js WebCanvas CV

Academic Activities

- Student Reviewer for Digital **Humanities Research Journal** Renmin University of China
- 2024 DH Oxford Summer School University of Oxford
- 2024 DH×RSE Summer School University of Edinburgh · Full Scholarship

Exhibitions

2023.07

Out of the Blue Drill Hall

Mixed Media (Virtual Reality) Section 2024.11

Flux Wave: Bounce Digital Fashion AR & VR Division

RCA2023 Graduation Show Battersea and Kensington Campus 2023.06