

# Yunlin Li

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## SUMMARY

A versatile and innovative developer grounded by a foundation in Network Engineering and a Master's in Immersive Technologies. Skilled in designing and implementing interactive applications, with experience in front-end development, XR development, game development, software development methodologies (Agile, Waterfall) and 3D modelling & animations. Demonstrated ability to integrate both artistic and technical aspects to solve complex development challenges, with an aptitude for problem-solving and multidisciplinary collaboration.

## EDUCATION

### University of Bristol

09/2023-12/2024

*Master of Science in Immersive Technologies (Virtual and Augmented Reality)*

Grade: 67 (Merit)

- Core Modules: Immersive Games Design and Production, Immersive Interaction and Audio Design, Augmenting the Real World, Virtual Environment Design, etc.

### Guangzhou University

09/2019-06/2023

*Bachelor of Engineering in Network Engineering*

Grade: 88 (2:1)

- Core Modules: Web Application Technology, Software Engineering, Database Principles, Data Structures, Object Oriented Programming (C++), Operating System (Linux), etc.

### Technical Skills

- Programming & Tools: C#, JavaScript (Vue.js, React.js, Node.js), Python, C++; MongoDB, MySQL; Git, SVN.
- Game Development & Design: Unity; Maya, RealityCapture, Photoshop, Procreate.

## PROFESSIONAL EXPERIENCE

### Agricultural Bank of China

09/2022-10/2022

*Software Engineer (Internship)*

- Defined the project requirements with product manager and collaborated with back-end developers to develop an E-commerce management system using Vue.js to the partner company customers, with SVN for version control.
- Designed static web pages with HTML and CSS and implemented front-end and back-end interactions using JavaScript for API integration, ensuring seamless data communication and system functionality.
- Conducted Value Stream Mapping (VSM) with end users to identify current inefficiencies and optimise workflows, improving system performance by 12% through iterative testing.
- Presented the final solution to the partner company and user base, receiving positive feedback for usability and performance improvements.

### Guangdong Planning and Designing Institute of Telecommunications Co., Ltd

07/2022-09/2022

*Software Engineer (Internship)*

- Developed front-end pages (e.g. order and product management) in an agile environment (Scrum) using HTML, CSS, and JavaScript (Vue & React), adapting to project requirements and delivering within 3 weeks.
- Collaborated with UI designers and back-end developers to build data visualisation dashboards using ECharts, enabling real-time data analysis and enhancing business decision-making efficiency.

### Tencent Technology (Shenzhen) Co., Ltd

02/2022-03/2022

*Algorithm Engineer (Part-time)*

- Analysed large-scale data processing inefficiencies and identified optimisation opportunities to reduce query execution time and eliminate redundant calculations for the algorithm engineering team.
- Optimised computational efficiency based on data dependency relationships, achieving a ~33% reduction in execution time for big data workloads using Python (pandas).
- Abstracted optimisation problems into a multi-way tree structure and developed a node caching algorithm in C++, minimising redundant calculations and improving analytical and machine learning tasks efficiency by 11-15%.

## **PROJECT EXPERIENCE**

### **VR Graffiti Stealth Game**

**05/2024-08/2024**

- Designed all aspects of the game (e.g. mechanics, narratives, levels, etc.).
- Created animations, poses and trigger logics of the VR hand models based on different interactions. Implemented UI design, spray can interactions and the paint mechanic using VR techniques in Unity (C#).
- Implemented AI behaviours with Behaviour Trees, enhancing NPC decision-making and game dynamics.

### **AR Application of Children Story Book**

**02/2024-04/2024**

- Designed the UI and developed the first scene of *The Gruffalo* story in Unity (C#) using AR techniques (e.g. tracking, raycast, light estimation, etc.).
- Generated a virtual 3D character model using RealityCapture and created animations in Maya.
- Maintained visual and narrative continuity, integrating seamlessly with other team members' scenes to ensure a cohesive storytelling experience.

### **VR Zombie Survival Shooting Game**

**02/2024-04/2024**

- Designed and developed the first-person game in Unity (C#) with teammates via GitLab for version control.
- Implemented the interactive game tutorial and UI, guiding players through core mechanics while maintaining an intuitive user experience.
- Created dynamic VR hand animations, poses, and trigger logic for immersive interactions and engagement.

### **VR Symphonic Planets Interactive Experience**

**02/2024-04/2024**

- Designed realistic materials, particle effects, and terrain generation in Unity to dynamically reflect different elemental properties in the game.
- Developed an interactive sound system by composing dynamic soundtracks, aligning musical elements with gameplay mechanics for an immersive audiovisual experience.

### **Virtual Environment Design of a Tea Shop**

**10/2023-12/2023**

- Created a realistic virtual tea shop in Maya, referencing real-world images taken in Bristol.
- Modelled detailed furniture, decorations and plants, applying textures and designing lighting of the environment.

### **Campus lost and found mini-program design and implementation**

**01/2023-04/2023**

- Conducted research and feasibility analysis, designing the functional modules, UI, and database structure.
- Implemented core features (e.g. login, upload & post, classify, search, comment, etc.) of the mini-program and the backend management system using Vue.js, Node.js, MongoDB, JavaScript etc.

### **Creative Programming for Digital Media & Mobile Apps**

**06/2022-08/2022**

*Online Course Organised by Goldsmiths, University of London*

- Developed interactive audiovisual applications and physics-based games in Processing, integrating sound, graphics, and user interactions for creative digital experiences.
- Implemented real-time physics simulations using JavaScript and the Box2D physics engine, enabling accurate object movement and realistic environmental effects.

## **ADDITIONAL EXPERIENCE**

### **Maxwonders Academy**

**03/2023-03/2024**

*Part-time Assistant English Teacher*

- Tutored students aged 7 to 17 for international English proficiency exams, including IELTS and KET. Prepared listening, reading, writing, and speaking materials tailored to different proficiency levels.
- Communicated with students' parents regularly, providing feedback and progress updates after each session.

### **Design of the Guangzhou University Postgraduate Admission Letter**

**03/2022-04/2022**

- Designed and created a postgraduate admission letter using Procreate and Photoshop, incorporating campus characteristics and local cultural elements into the envelope design.

## **AWARDS & LANGUAGES**

**Awards:** Guangzhou University 3<sup>rd</sup> Prize Scholarship (2019-2020 & 2021-2022).

**Language:** English (Fluent); Cantonese & Mandarin (Native).