Liangyi Li

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EDUCATION

Beijing University of Posts and Telecommunications **Hainan, China**

Candidate for Bachelor of Engineering in Digital Media Technology Expected June 2027

- **GPA:** 3.6 / 4.0
- **Honors:** National Scholarship; Merit Student of Queen Mary School of Hainan, BUPT
- **Relevant Coursework:** Algorithms and Data Structure (86), Introduction to Artificial Intelligence (90), Design & Build Project (100), Mathematical Modelling (93), Mathematical Foundations of Data Science (90), Introductory JAVA Programming (92), Game Engine Fundamentals (92),

PROJECT EXPERIENCE

Dialect AI – Multilingual Voice Interaction Mini Program | Team Project | 2025

• Developed an AI-powered WeChat Mini Program that enables real-time interaction and translation across multiple Chinese dialects.

• Integrated iFlytek Spark AI and Tencent Cloud Speech SDK for speech recognition, dialect classification, and voice synthesis.

• Designed an interactive 3D virtual avatar that speaks and responds in users' native dialects to enhance engagement.

• Implemented serverless cloud functions for message processing and data storage, ensuring low-latency communication.

• Aimed to preserve dialect culture and promote inclusive human–AI communication through intelligent voice interfaces.

Interactive Web Design Project | Team Project | Apr 2025

• Collaborated with team members to develop a responsive e-commerce website featuring search, favorites, shopping cart, and login modules.

• Built the website structure and optimized CSS & JS for consistent UI/UX experience.

•Independently developed the backend using a local server to support registration, login, search, and item management functions.

Data Structure Coursework Project | Individual | Sep–Nov 2024

•Designed and implemented core data structures and algorithms in Java for optimized computational performance and modular architecture.

• Practiced efficient data manipulation and algorithmic problem solving relevant to AI and robotics systems.

Shapeville – Math Learning Desktop App | Java Swing | Individual | May–Jun 2025

- Developed a multi-window GUI math training app using Java 17 and Swing, featuring shape recognition, angle classification, and real-time scoring.
- Designed MVC architecture and an automatic feedback system with reset triggers for incorrect or timed-out responses.

Solar System Simulation | Unity & C# | Individual | Oct–Nov 2024

- Built an interactive planetary system simulation implementing Newton's Law of Gravitation ($F = G \cdot m_1 \cdot m_2 / r^2$).
- Integrated physics materials and scripting to accurately reproduce orbital motion and rotation for all planets.

Billiards Game Simulation | Unity & C# | Individual | Nov–Dec 2024

- Created a 3D billiards game with physical collision detection, turn-based control, and camera movement logic.
- Supported dual-player mode on PC, enhancing gameplay flow and interaction feedback.

"Smart Washing Machine" – Blender Animation | Individual | Oct–Dec 2024

- Modeled and rigged a 3D washing machine character in Blender with human-like movements and idle animations.
- Imported model into Unity and added interactive behaviors, illustrating creative use of animation and interactivity.
- Recognized as one of the top creative works in class.

"The Blade" – AI-Themed Digital Short Film | Team Project | Mar–Apr 2025

- Co-created a short film exploring "Humans using AI" vs. "AI controlling humans."
- Led animation and scene composition using Blender and After Effects; responsible for camera editing and sound design.
- Featured in the university's Outstanding Digital Media Exhibition.

AI Pathfinding Game – Pac-Man Reinforcement Prototype | Individual | Apr 2025

- Designed AI ghost behaviors with dynamic path prediction using the A* search algorithm and finite-state machines.
- Simulated varied AI personalities (aggressive, ambush, evasive) within Unity to visualize adaptive strategy and pursuit behavior.

- Explored reinforcement learning and strategy-based agent design.

Digital Audio Analysis and Classification Experiment | Individual | Dec 2024

- Used Python and Audacity to extract multi-dimensional audio features (spectrum, rhythm, emotion).
- Visualized sound transformations by generating Blender-driven "sound deformation spheres."
- Applied extracted features for preliminary sound classification (natural / mechanical / human voice).

TECHINICAL SKILLS

Technical Skills

- •Programming Languages: Python, Java, C#, C, HTML/CSS, JavaScript
- •Frameworks & Tools: Unity, Processing, Flask, Node.js
- •Design & Multimedia: Blender, Adobe After Effects, Audition, Premiere Pro
- AI & Interaction: Speech Recognition APIs (iFlytek, Tencent Cloud), OpenAI API, 3D Animation & Interaction Design

HONORS & AWARDS &INTERN

•Second-Class Scholarship, Beijing University of Posts and Telecommunications — 2024–2025 Academic Year
•Third-Class Scholarship, Beijing University of Posts and Telecommunications — 2023–2024 Academic Year
•National First Prize, National Creative Competition of Digital Media Technology — 2025
•Excellent Award (Campus Level), National College English Competition — 2024
•Volunteer Certificate, The 12th National Traditional Games of Ethnic Minorities — 2023
•Team Leader, Led class volleyball team to win 2nd Place in the School Volleyball Tournament, demonstrating strong leadership and teamwork skills