Xinzhe Jiang

+1 919-949-0347 · xinzhe.jiang@duke.edu · https://jiangxinzhezhe.github.io/

EDUCATION

Duke University — Durham, NC
MEng in Game Development — May 2026
B.A in Computational Media — May 2024
- GPA: 3.9/4.0; Dean's List All Semesters; Graduation with Distinction; Summa Cum Laude (Top 5%)

PROFESSIONAL EXPERIENCE

Tencent — May 2025-Jul. 2025
Software Development Intern — Guangzhou, China
- Designed and packaged a modular social SDK using JavaScript and WeChat APIs, with reusable components and UI templates that enabled 200+ studios to integrate PvP/co-op features, reducing average launch time by two weeks
- Developed and deployed 3 casual games with Unity and JavaScript, serving 5M+ active players with real-time competition features and responsive UI/UX across WeChat instant game platform
- Built automated ETL pipelines with Python and SQL to process player behavior data, created interactive Tableau dashboards for DAU/ROI analysis, identified key engagement patterns that improved retention by 25%
- Collaborated across frontend and backend teams using Git, Jira, Agile workflows across the full software lifecycle

Game Square — May 2024-Aug. 2024
Game Development Intern — Shanghai, China
- Designed and implemented 3 exercise-based educational Unity levels in C#, combining motion-tracking gameplay with interactive puzzles to help children explore mathematical patterns through physical movements
- Built analytics scripts in Python and SQL to track activity engagement across 450+ beta testers, optimized game mechanics and level design based on data-driven insights and tester feedback, resulting in 50% increase in DAU
- Taught project-based game development classes for 20+ K-12 students, introducing computational thinking and hands-on coding sessions to build foundational technical skills in an engaging learning environment

RED Note (Xiaohongshu) — Apr. 2023-Jun. 2023
Data Engineering and Analytics Intern — Shanghai, China
- Processed and aggregated multi-channel advertising data from 15+ brands through Python and SQL, generated key performance metrics (CTR, CPE, ROI) and created dashboards to improve budget allocation efficiency
- Designed and executed A/B testing framework for ad performance optimization, conducted statistical analysis to validate hypotheses, achieving 25% increase in CTR and 20% reduction in CPE across campaigns
- Optimized MySQL database queries and worked with backend engineers to improve API response times for real-time analytics endpoints, reducing dashboard load times by 40%

ENGINEERING PROJECTS

Climate Fiction Educational Story Archive Web | React, MySQL, Figma | Web Designer & Developer
- Developed full-stack educational web platform for environmental story exploration with React frontend and Python/Flask backend, supporting advanced search and categorization by age, grade level, and theme
- Designed normalized database schema and RESTful APIs for efficient story indexing, retrieval, content management
- Partnered with K-12 educators to deploy pilot version for classroom, incorporating feedback into development cycles

Ech8 - Language Based Puzzle Game | Unreal Engine 5, C++, Blueprints | Gameplay Engineer
- Implemented 2 core gameplay mechanics using hybrid C++/Blueprint architecture, featuring context-sensitive grammar systems and dynamic rule evaluation with real-time player input processing
- Collaborated through design iteration cycles, implementing rapid prototyping workflows in Blueprints before C++ optimization, reducing iteration time by 40% and accelerating feature deployment
- Collaborated with cross-functional teams to integrate narrative and UI feedback loops for adaptive puzzle difficulty

Critical Analysis of Video Games | Teaching Assistant
- Guided graduate students through analysis of game systems, interaction design, and player psychology
- Supported assignments in UE5 and data analysis, connecting design critique with engineering implementation

Duke University Game Jam 2024 – Winner | Unity, C#, UX/UI
- Designed and built cooperative gameplay systems in C#, implementing reactive mechanics, real-time player feedback, and dynamic difficulty scaling through data-driven parameter tuning

ADDITIONAL INFORMATION

- **Technical Skills:** Python, Java, C++, C#, JavaScript (TypeScript, React, Next.js), SQL, MySQL, R, Unity, Unreal Engine 5 (Blueprint & C++)
- **Tools & Platforms:** Git/GitHub, Linux, Jira, Tableau, Figma, Adobe Creative Suite, Maya, Fusion 360, A/B Testing, Data Visualization, Agile, UX/UI Design