

YIYANG LU

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LANGUAGE, SKILL & OTHERS:

- **Tools:** Unity, Unreal, Perforce, Github, Jira
 - **Programming Languages:** C++, C#, Blueprint, Python, JavaScript
 - **Language:** Chinese (native), English (fluent)
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PROJECT EXPERIENCE:

Firesafe Friend – Solo Programmer Sep. 2024 - Present

- Created the core features of a **3D strategy and fire simulation** game using **C#** and **Unity**
- Developed a **wildfire spreading simulation** with realistic behavior models and optimized VFX performance for smoother gameplay
- Made a dynamic **multiplayer inventory** system and UI using **Model-View-Controller**

Firewise Citizen – Solo Programmer Mar. 2024 - Present

- Developed a full-scale simulation game from concept to completion, including **AI** systems, **branching** dialogues, and dynamic **traffic simulation** in **Unity**
- Designed and implemented solutions for grid-based dual-direction **traffic simulation** using dynamic **path-finding** and **vehicle AI**
- Created a custom **level editor** for enhanced efficiency for designers making new-level maps

Gulltastrophe – Gameplay Programmer, Designer Aug. 2024 - Present

- Worked with a team of 6 using **Agile** methodologies to create a **3D action-adventure** game in **Unreal 5**
- Conceptualized and pitched the game, securing greenlight approval among 20 + ideas
- Designed the main game loop and level progression system with other team members
- Created the dynamic level progression and destructible system using **Blueprint**

Dracomaton – Gameplay & UI Programmer Jan. 2023 - June. 2023

- Collaborated on a **2D roguelike** game in **Unity**, achieving over 1,000 sales on Steam
 - Implemented multiple **game systems** for dynamic resource management and item spawning
 - Proactively addressed player **weapon equipping** by seamlessly connecting UI with gameplay
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PROFESSIONAL EXPERIENCE:

Social Emotional Technology Lab, UCSC Mar. 2024 - Present

Research Assistant, Lead Programmer

- Developed different **educational games** about wildfire preparedness using **Unity** and **C#**
 - Designed robust game systems ensuring platform stability and adaptability
 - Built flexible game systems to fulfill the changing research goals of the collaborative research team
 - Delivered all the games on **multiple platforms** with bug fixes and platform-specific optimization
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EDUCATION:

University of California, Santa Cruz – Silicon Valley Campus Expected Mar. 2025

❖ Master of Science: Games & Playable Media

University of California, Santa Cruz 2019 - 2023

❖ Bachelor of Science: Computer Science: Game Design