Garrick Chiu

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EDUCATION

University of California, Riverside

Riverside, CA

Bachelor of Science in Computer Science, Minor in Mathematics

Sept. 2020 - Dec 2024

GPA: 3.58

Relevant Coursework: Intermediate Data Structures and Algorithms, Discrete Structures, Applied Linear Algebra,

Software Construction, Logic Design, Embedded Systems, Operating Systems, Compiler Design Awards: Chancellor's Honor List, CitrusHack2022: First Place, CutieHack2022: Third Place

TECHNICAL SKILLS

Languages: C++, C#, Python, HTML, CSS, Javascript

Tools and Frameworks: Unity, Git, VSCode, Adobe Photoshop, React.js, Node.js, Express, MongoDB, Arduino

EXPERIENCE

Technical Support

May 2022 – Present

zyBooks

Remote

- Coordinated with engineers to address platform issues and provide insights to the sales team on zyBooks functionalities, facilitating timely solutions and fostering cross-team collaboration
- Assisted 5000+ students, 100+ instructors, and 20+ zyBooks staff on account issues and bug fixing
- Cut company spending by $\sim 10\%$ by solving over 6500 tickets

Game Designer

Sep. 2021 – June 2022

Opin Mind Games

Riverside, CA

- Collaborated with software engineers in an agile development approach to establish a code review system, ensuring rapid deployment times
- Utilized Unity and C# to conceptualize and implement engaging gameplay mechanics, contributing to a user-friendly and dynamic game experience
- Spearheaded the launch of Sketch on Steam, leading to over 11,000 downloads in 6 months
- Designed 15 unique enemy AIs, each incorporating custom animations and mechanics within the Unity framework
- Implemented object-oriented programming to write clean and extensible code and explored advanced data structures to allow for custom inputs by the user and enhancing code efficiency by $\sim 20\%$

PROJECTS

Blade | Unity, C#, Git | GitHub

- Led the development of Blade, a 2D platformer featuring unique parrying combat and immersive exploration
- Collaborated with a team of 10, integrating engineering, narrative, and art to ensure seamless gameplay
- Leveraged Unity's built-in physics to create fluid character movement and environmental interactions
- Integrated Yarn Spinner to architect a dynamic dialogue system, empowering players with branching narrative choices and fostering deeper in-game character interactions

Grow-Tential | Unity, C# | GitHub

- Conceptualized Grow-Tential, a game that blends farming and combat elements, translating the unique idea of seeds turning into enemy monsters into engaging gameplay
- Established a game economy and progression system, where combating monsters rewards players with coins, used to upgrade weapons and prepare for escalated challenges, ensuring player engagement is an incentive to progress
- Navigated through development challenges and problem-solved effectively under time pressure

TRON Game | Arduino, C++, $Nokia\ LCD$, $SNES\ controllers$

- Crafted a game incorporating TRON-inspired gameplay using an Arduino microcontroller and a Nokia LCD display, enhancing the classic gameplay with the introduction of unique power-ups
- Incorporated support for 2 players using SNES controllers as input devices
- Built custom libraries and utilized C++ to program the game logic and control hardware components

Rose of the Labyrinth | Unity, Blender, C# | GitHub

- Designed a first-person puzzle game, drawing gameplay inspiration from 'Portal' with rising and falling platforms
- Created adaptive gameplay environments with interactive platforms and distinct gimmicks on every level
- Implemented challenging puzzles involving object interaction and environment manipulation