Thomas Price

Github: https://github.com/TPlemur
Portfolio: https://tplemur.github.io/Portfolio/index.html

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EDUCATION

University of California, Santa Cruz **Santa Cruz, CA**
B.S. Computer Science Game Design *September 2020 - August 2023*

- Developed custom shaders and algorithms to efficiently animate over 200 vines to seek and ensnare players
- Ensured adherence to coding conventions on a team of 6 programmers to ensure modularity and integration
- Incorporated playtester feedback to create an intuitive and appealing UI
- Wrote both physics based and non-physics based orbital motion systems
- Designed a website using an image manipulation AI to redraw user input
- Developed 11 games ranging from a story based platforming game, to real time physics games, and beyond

EXPERIENCE

Breathe Healthy Interactive **Berkeley, CA**
Shader consultant *2023 - 2024*

- Wrote HLSL shaders for Unity's URP to simulate post processing effects like grayscale and color filtering
- Provided comprehensive documentation allowing seamless integration of the shaders into the game world
- Provided consultation on breath detection implementations

Zuchero Lab - Glial Cell Biology at Stanford School of Medicine **Stanford, CA**
Lab Assistant *2017 - 2021*

- Designed a digital management system to track lab inventory levels
- Responsible for ensuring the lab is stocked with 40 key items

Personal Projects **Palo Alto, CA**
Developer

- Built a reactive portfolio website using custom CSS modules
- Ran a statistical analysis of an economy shooter based on 8 collected statistics, featuring hundreds of derived statistics, enabling noticeably effective balance changes
- Implemented a parametric music playing and detecting system in GDScript
- Using Capacitor to port one of my web games to Mobile platforms.

SKILLS

Development

- Implemented rapid prototyping with lightweight games engines such as Twine, Phaser, Crisp-game-lib
- Designing levels to fulfill player expectations and guide player progression
- Balancing economies using data driven analysis
- Doing systems based analysis and design of games
- Applied principles of graph theory to analyze traversability of game levels
- Metric and question based analysis of playtesting

Technical

- Writing documented, commented code in C, C++, C#, Javascript, HTML, CSS, Python, Lua, and HLSL
- Implementation of Player Movement, UI, Pathing, Inventory management, etc in Unity, Unreal, and Godot
- Wrote shaders for Unity and Godot using both Shader Graph and HLSL
- Proficiency with design patterns like State, Iterator, Prototype, etc.

Art and Design

- Sound design using both foley techniques and synthesis software like PureData
- 3D modeling using Autodesk inventor and Blender
- Designing intuitive and aesthetically pleasing UI elements

Interpersonal

- Collaboration with Trello, Github, Google Suite, and other tools to maintain a high standard of quality
- Experience leading a programming team and creating coding conventions, as well as an existing team's style
- Brainstorming and collaborative coding