

# Thomas Price

**GitHub:** <https://github.com/TPLemur>

**Portfolio:** <https://tplemur.github.io/Portfolio/index.html>

Palo Alto, California

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## EDUCATION

### University of California, Santa Cruz

Santa Cruz, CA

*B.S. Computer Science Game Design*

*September 2020 - August 2023*

- Ensured adherence to coding conventions on a team of 6 programmers to ensure modularity and integration
- Developed custom shaders and algorithms to efficiently animate over 200 vines to seek and ensnare players
- Developed over 10 games
- Designed a website using an image manipulation AI to redraw user input

## 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 solution to maintain lab inventory levels at all times

### Personal Projects

Palo Alto, CA

*Developer*

- Custom built a reactive portfolio website
- Built 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
- Published a game app on both Android and IOS

### FIRST Robotics team 192

Palo Alto, CA

*Mech lead*

- Rapidly prototype systems for various mobility and manipulation tasks
- CAD and fabricate finalized designs
- North Arizona regional winning team member

## SKILLS

### Technical

- Tech support for both macOS and Windows, including debugging and hardware replacements
- Writing documented, commented code in C, C++, C#, Javascript, HTML, CSS, Python, and HLSL
- Implementation of game mechanics in Unity, Unreal, and Godot
- Wrote shaders for Unity and Godot using both Shader Graph and HLSL
- Implemented test driven design.
- Proficiency with design patterns like State, Iterator, Prototype, etc.
- Customized SQL queries for specific tasks
- Use of Shell for direct os level tasks
- Proficient with Ubuntu and other UNIX based systems
- Used Flask to host a chat-gpt powered dungeon crawler

### 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

### **Interpersonal**

- Collaborated using Trello, JIRA, and the Google Suite to ensure that the team is well coordinated
- Used Github and other Git supporting software to maintain good version control
- Collaboration using the Agile methodology
- Experience both leading and working on teams
- Brainstorming and collaborative coding