Curriculum Vitae – Thom Mott

Personal Information

Thom Mott
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Skills

Operating systems: Linux

Programming languages: C, C++, C#, HLSL, JAVA, JavaScript, TypeScript, Python, Nix, RISC-V Assembly, Zig

Engines: Unity, Godot, Phaser, Dear ImGui

Languages: English

Education

University of California, Santa Cruz Santa Cruz, CA *June 2024-Present*
Degree in Progress: Computer Science: Game Design (B.S.)
Dean's List: Fall 2024, Winter 2025, Spring 2025

Cabrillo College Aptos, CA *August 2022-August 2024*

Employment History

Resarch Assistant, SLOTHLab UC, Santa Cruz *September 2025-Present*
- Worked alongside other undergrad and graduate researchers on a submission to the annual Generative Design in Minecraft (GDMC) competition.
- Worked in Python using the Amulet Map editor, writing a system that would destroy trees that would otherwise conflict with city generation.

Computational Media Undergrad Course Assistant UC, Santa Cruz *March 2025-Present*
- Ran in-person and online office hours to aid students in upper-division Computer Science courses.
- Graded student papers.

Computer Science Undergrad Course Assistant UC, Santa Cruz *January 2025-Present*
- Ran in-person and online office hours to aid students in upper-division Computer Science courses.
- Maintained course tech stacks and assisted professors with course material preparation and troubleshooting.
- Graded student papers.

Research Assistant, SET Lab UC, Santa Cruz *September 2024-July 2025*
- Contributed to a research-driven AR game focused on climate resilience education and community engagement, working alongside a postdoctoral researcher and undergraduate research assistants.
- Developed UI components and a location-based overworld map in Unity, and provided technical guidance to team members on engine usage and development practices.

Intern, Guardian Gamer Los Gatos, CA *June 2024-September 2024*
- Built an internal admin panel for user and group management, supporting flexible lookup by multiple account identifiers and real-time modification of records, with data sourced and processed from AWS-managed databases.

Projects

Gamba Gun Programmer, Designer *June 2025-Present*
- Developed a GPU-based splat rendering system enabling high-density, dynamic surface effects (e.g. fire propagation), improving visual fidelity and gameplay expressiveness.
- Implemented a localisation system to support scalable multilingual content.
- Contributed to refactoring and long-term maintainability of core gameplay systems in an active commercial project.

California V2 Producer, Designer, Artist *March 2020-Present*
- Led production for a 6-person international team over six years on a large-scale curated map for "Unturned".
- Designed major locations, NPC-driven quest content, and gameplay balance across survival systems.
- Created hundreds of optimised 3D assets to support a cohesive open-world environment.
- Organised and coordinated large-scale playtests across multiple countries and time zones.

Wang Slime Creator *November 2025*

- Implemented a fully GPU-driven slime mould simulation operating over a procedurally generated terrain.
- Integrated Wang tile-based world generation with live runtime updates, allowing dynamic modification of the simulation domain.
- Focused on performance-oriented design and parallel execution.

Sistor Fixor Creator *November 2025*

- Developed a digital logic puzzle game prototype in Unity within a two-day timeframe.
- Implemented a simplified but internally consistent logic simulation system focused on problem-solving rather than real-world electronics accuracy.
- Designed timed circuit-based challenges with clear input/output constraints.

Dungeon Generator Creator *June 2025*

- Built a performant procedural dungeon generator using a backtracking-style algorithm with weighted random selection.
- Designed modular room connectivity inspired by "The Binding of Isaac".
- Emphasised deterministic generation and runtime efficiency.

StrongBadZone Programmer *Feburary-March 2025*

- Recreated the "StrongBadZone" sequence from "Homestar Runner" using TypeScript and Phaser 3.
- Adapted an animation into an interactive gameplay experience while preserving the original visual style and tone.

Spebby's Chess Engine Programmer *November-December 2024*

- Implemented a chess engine and AI from scratch in C++, using bitboards for efficient board representation.
- Developed a Negamax-based AI with heuristic evaluation, capable of real-time play to depth 5.
- Built a graphical frontend using Dear ImGui.

Booliards Programmer *April 2023*

- Contributed to a fast-paced arcade billiards game developed in Unity.
- Worked on game and wave design, achievements, and backend architecture.
- Integrated platform services including Newgrounds APIs.

Egg Rush Programmer *July 2021*

- Developed core gameplay systems, enemy behaviours, and upgrade mechanics for a beat'em-up game jam entry.
- Delivered a complete, polished experience within a three-day development window.

Tower of Towers Programmer *March-May 2021*

- Implemented core gameplay features and level content for a 16-bit-style platformer.
- Wrote localisation support and platform integration.

Easter Island Lead, Designer, Artist *June 2025*

- Led development an officially endorsed curated map for Unturned, featured in-game.
- Focused on level design, gameplay balancing, project coordination, and 3D asset creation.
- Supported through post-release content updates and maintenance, including bug fixes and optimisation.