

# SWARNADITYA SINGH

GAMEPLAY PROGRAMMER | UNITY & GODOT | SYSTEMS & TOOLS

## PERSONAL PROFILE

Gameplay programmer with hands-on experience building and shipping multiple WebGL, mobile, and PC games, consistently delivering under tight deadlines. Strong in systems thinking, rapid prototyping, and gameplay mechanics using Unity and Godot. Interested in gameplay systems, tools development, and design-driven engineering.



## WORK EXPERIENCE

### HiVoco Studios

*Consultant | October 2025 - Present*

- Assisted in improving AI-generated video content using Blender and post-processing workflows.

### Independent Game & Software Developer

*Self-Directed Projects & Game Jams | 2021 - Present*

- Designed and developed multiple games across WebGL, Unity, Godot, and Love2D, including jam entries and indie releases.
- Built gameplay systems, mechanics, and prototypes under tight time constraints during game jams and challenges.
- Developed Linux-first tools and terminal-based applications for automation and productivity.
- Explored performance-focused, minimal-dependency design across games, utilities, and experimental projects.

### ProtaTECH Inc.

*Internship | May 2024 - Jul 2024*

- Built Angular 17 + ASP.NET Core admin portal for internal video ops; reduced asset review time 42% via batch actions and lazy-loaded lists (P95 load 420 ms → 230 ms)
- Designed FFmpeg-based transcode/thumbnil pipeline with parallel job queue (Docker + Linux cgroups); 4.8x throughput at constant cost; error rate <0.5% with retry/backoff.

## CONTACT ME AT

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- [GitHub](#)
- [Steam](#)
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## SKILLS SUMMARY

- Game Development
- Unity (C#), Godot (GDScript, C#)
- Gameplay systems, input handling, physics, state machines
- Progression systems, AI state machines, gameplay architecture
- PC builds, WebGL builds, Mobile builds

## DESIGN AWARENESS

- Core loops, player feedback, difficulty tuning
- Actively studying formal game design and applying concepts through rapid prototypes

## PROGRAMMING

- Python, C#, GDScript, Lua, JavaScript
- Data Structures & Algorithms, debugging

## PROJECTS

### SuperPacker

*PC / Steam*

- Designed and implemented core idle-clicker mechanics, including progressions, scaling, and feedback loops.
- Built gameplay systems using Godot (C#) with a focus on balance and player retention.
- Published on Steam; managed builds and deployment.

### Big Baby Goes Wild

*PC / Itch.io*

- Designed and implemented core movement and melee mechanics, including the spawn system.
- Built gameplay systems using Unity with a focus on narratives.
- Made for WTF x IGDC Game Jam.

### Zombie Shooter

*WebGL / Itch.io*

- Implemented top-down combat systems with basic enemy AI state logic and responsive player controls.
- Optimized for WebGL performance.
- Completed in 2 days as a rapid prototype.
- Completely made using JavaScript.

## EDUCATIONAL HISTORY

### Birla Institute of Technology, Mesra

*Bachelor of Computer Applications | Aug 2022 - Apr 2025*

- Data Structures and Algorithms: Graph Algorithms, Search Algorithms.
- Database Management Systems: SQL, SQLite, NoSQL.
- Developed flix-cli; a highly efficient, powerful movie / tv shows scraper