Nguyen Gia Huy

Hanoi, Vietnam • +84-974-582-392 • huy20041512@gmail.com • LinkedIn • GitHub

EDUCATION

Thang Long University Hanoi, Vietnam
Bachelor of Science in Information Technology Expected Graduation: 05/2026
GPA: 3.5/4
Honors/Awards:

- Merit Scholarship for Excellent Academic Performance
- Consolation Prize in Vietnamese Student Olympiad in Informatics 2023
- Honorable Mention in ICPC National Vietnam 2023
- **2st prize** at TFI Programming Contest Of Thang Long University

Relevant coursework: Introduction to Computing, Data Structures Algorithms, Object-oriented Programming, Software Development, Computer Infrastructure

SKILLS & CERTIFICATIONS

Programming: C++, C#, Python, Javascript
Tools: Unity, VS Code, Git, Fork, Postman, Unity Version Control
Design Patterns: Singleton pattern, Observer pattern, State Machine
Algorithmic Skills: Solved 800+ problems on Codeforces (Max rating: 1437, Specialist); Leetcode Contest Rating 1665
Languages: Fluent in English

PROJECTS

TypingMage – Game Developer GitHub | Play
● **Design Patterns:** Applied **Observer Pattern** for real-time UI updates, Singleton for global state management, and Object Pooling for efficient enemy spawning.
● **UI:** Developed an interactive UI system displaying player score, leaderboard.
● **Scoring and Defeat:** A 2D top-down action typing game. Each enemy appears with a random sequence of arrow keys (← ↑ → ↓) displayed above them. Players must input the correct sequence to defeat them.
● **Leaderboard Integration:** Integrated PlayFab for user login and real-time leaderboard ranking.
● **Tools & Technologies:** Unity, C#, Tilemap, Animator,Observer Pattern, Singleton, Object Pooling, PlayFab**.**

ElementalPowder – Game Developer | Software Engineering Course GitHub | Play
● **Design Patterns:** Applied **Observer Pattern** for UI updates and sound synchronization, **Singleton** for managing global game states, and **State Machine** for handling player and enemy behaviors.
● **UI and Audio:** Developed an interactive UI system displaying player stats, available skills, and buffs. Implemented dynamic sound effects and background music that adapt to in-game events.
● **Gameplay Mechanics:** A 2D top-down action game with level-based progression. Each level has a number of enemies, players must defeat all enemies to advance, with a **boss stage** introducing unique mechanics.
● **Combat System:** Players use bomb placement mechanics with timed explosions to clear obstacles and defeat enemies. **Skills are not available by default**; instead, players must **find and collect them** from destructible wooden crates scattered across the map.
● **Items and Buffs:** Wooden crates may contain **buffs** (speed boosts, shields, healing) or **skill pickups** that allow players to use special abilities.
● **Tools & Technologies:** Unity, C#, Tilemap, Animator, Audio Mixer, Observer Pattern, Singleton, State Machine.