



# Van Phan

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## EDUCATION

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**Rochester Institute of Technology** | Bachelor of Science in Game Design and Development

Expected May 2024

- *Student Ambassador*, School of Interactive Games and Medias
- **GPA:** 3.61

**RIT Dean's List:** Spring 2020 - Current

## SKILLS

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**Languages:** C# | C++

**Tools:** Unity | Unreal 5

## EXPERIENCE

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### AI Engineer for Magic Spell Studios

Jan 2022 – Dec 2022

- Re-developed AI system to use a behavior tree system. Designed the architecture and system direction in lucid chart.
- Removed over 60 scripts from and their dependencies to clean up development environment for engineers.
- Developed the UML graph in lucid chart to visualize all the systems in the project (over 140 systems)
- Resolved over 30 gameplay bugs in the code base (system crash, incorrect character/item behavior, and UI bugs).

### RIT Teaching Assistant

Jan 2022 – May 2022

- Assisted over 50 students in learning: Html, CSS, JS programming, and developing portfolio sites and web apps.

### RIT Teaching Assistant

Aug 2021 – Dec 2021

- Assisted 30 students in learning: version control, C# MonoGame pipeline, data structures, and search algorithms.

## PROJECTS

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### Client System | Unity C#

Apr 2023 – Current

- Developed 2D character ability system, additive scene swap design pattern, and AI design pattern.

### Client Systems | Unreal Engine C++

Jan 2023 – Current

- Developed a platforming game with checkpoints, abilities with UI cooldowns, wall-running, and game states.
- Developed VFX environment with object grabbing/throwing system with camera zoom events.
- Developed an expanded version of the spline component to allow customization in meshes and refresh movement on runtime for gameplay. Developed puzzle gameplay elements to merge into and swap between playable splines.
- Created all system architecture across all 3 projects to utilize Unreal Engines newest input system. Developed all systems in C++ with variables and events customizability exposed in blueprints so clients could just use blueprint systems to add customizability.

### Shrine of Radiance | Unreal Engine Blueprints

Mar 2022 – Apr 2022

- Developed 18 gameplay blueprints (level saving, gameplay, UI). Created an audio layering system using the Meta-Sounds package.

### Graphics Engine | C++

Mar 2022 – Apr 2022

- Developed a graphics engine to render normal and material textures, calculate physics-based lighting, and take in FBX files to compute the data into triangles using C++ and HLSL. Developed a simple camera system with C++.

### Curley Brackets | C#

Feb 2019 – May 2019

- Coded pathing algorithms, integration for GUI/External tools, audio implementations, and tower-defense logic.
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