

# Joseph Lu

## Software

Autodesk Maya  
ZBrush  
Autodesk Mudbox  
3DCoat  
Substance Painter  
Substance Designer  
Adobe Photoshop  
Adobe Suite  
Marmoset Toolbag  
Figma

Unity  
Unreal Engine  
Microsoft Visual Studio  
  
Sourcetree  
Github  
BitBucket

## Programming Languages

C#  
Java  
JavaScript  
C++  
HTML5  
CSS  
HLSL

## Skills

3D Modeling  
UV Unwrapping  
Texturing  
(Handpainted, PBR)  
Technical Art  
Shadergraph  
Unity Particles  
Animation  
Rigging  
UI/UX  
Game Design  
Programming  
Source Control

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## Work Experience

### Technical Artist, [Pomsky Games](#)

June 2022 - Present

- Craft captivating **stylized 3D** diorama in **Unity**, enhancing the creative vision.
- Develop custom shaders with **Shadergraph**, and optimize lighting.
- Model **assets** for optimal performance and visual quality.
- Design **puzzles**, develop **prototypes**, and create **greybox** environments.

### Unity Developer, US Department of Defense

May 2020 - Present

- Provide technical guidance for **Unity**-based military training simulations.
- Design and wireframe **UI/UX** with Unity's **Canvas System** and script functionality using **C#**.
- Optimize **asset pipeline workflows** to boost team efficiency and productivity.
- Create photorealistic **3D models** and **PBR textures** using **Maya** and **Substance Painter**, script custom shaders with **HLSL** and **ShaderGraph**, and integrated assets into **Unity**.

### 3D Developer, [Cedar Band Corporation](#)

December 2018 - May 2020

- Engineered **Unity** builds for soldier training on multiple platforms.
- Architected project workflows, designed **UX/UI** in Unity's **Canvas System**, and implemented data parsing techniques.
- Developed optimized asset creation strategies using photogrammetry, texture atlasing, and PBR workflow to streamlined development and enhanced performance.

### Game Design Intern, [Wooga](#)

April 2017 - November 2017

- Researched Match3 mechanics to enhance design strategies, resulting in improved gameplay experience.
- Designed **Match3** levels using the proprietary engine and **Unity**, and automated config and error detection with **JavaScript** in Google Sheets.
- Conducted playtesting to identify and document bugs, generated tickets.

## Projects

### The Light Within — <https://pomsky.games/thelightwithin>

Mobile isometric puzzle game focusing on mental health. As the **technical artist**, I create custom materials, particle systems, and optimize builds, contributing to the narrative and puzzle design. Recognized for the Unity for Humanity Grant 2024.

### Flicker Fortress — <https://aquilateam.itch.io/flickerfortress>

3D puzzle platformer, players control a firefly that merges with electrical devices to solve challenges. I contributed as a **3D Artist**, **Game Designer**, and **Programmer**, responsible for creating character models and props, developing custom shaders using HLSL, and implementing particle effects. Additionally, I optimized assets in Unity, designed the UI/UX, and scripted core game mechanics to enhance the overall gameplay experience.

### Galactic Clapback — <https://jl4312.itch.io/clapback>

Developed a mobile bullet hell game for **Android** in **Unity**, where players dodge and parry enemy spaceships. Created all **3D models**, **UI** elements, and visual effects, utilizing **Shader Graph** to develop custom shaders that enhanced the game's visuals. Designed and implemented the shop and lottery system.

## Education

### Rochester Institute of Technology (RIT)

Bachelor of Science in Game Design and Development

## Extracurricular Activities

### GDC Conference Associate

2018, 2019