

# CS 148 Final Project Report

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For this project, I created a cyberpunk-inspired street scene with a focus on neon signs and bright cool-toned colors. I was inspired to make this scene because it matches the aesthetic and setting of many video games and TV shows I watched as a kid. Specifically, as a huge Pokemon fan, I was trying to pull references from media like Detective Pikachu and shots from the new Pokemon Z-A game coming out this October to make my scene. My goal was to build a really visually appealing environment that showcased realistic lighting effects such as reflections on wet pavement, color bleeding from neon signs, and soft shadows from area lights.

## Inspiration References



In terms of the design, I made most of the main geometry from scratch, including the street layout, sidewalks, signs, streetlights, shop details, and most of the surrounding buildings. I used area lights and emissive materials to simulate neon lighting, which worked with Cycles render engine to create photorealistic reflections and illumination throughout the scene. The only downloaded assets were the distant skyscraper buildings in the background, the texture for the Chinese restaurant building in the bottom right corner, and the white object near the fence on the left side of the street. Everything else was made by me.

For advanced Blender/Cycles features, I used depth of field to focus the attention of the picture to the middle section of the street while softly blurring the distant skyscrapers and foreground edges. I chose this camera angle specifically in order to lead the viewer's eye toward the glowing city skyline in the background. This gave the scene a more cinematic look and helped create a sense of comprehensiveness, which I believe works really well with the cyberpunk aesthetic, as these kinds of scenes are portrayed more “busy” and have lots of small details that help with the whole picture. I also specifically used emissive materials in order to enhance the glow of the neon signs, and fine-tuned the roughness and normal maps on the street surface to aim for a more wet-looking design for the road, making it seem like it just rained.

# Sources

[https://www.youtube.com/watch?v=K1L\\_ERkU0XI](https://www.youtube.com/watch?v=K1L_ERkU0XI) - Brick Material Tutorial

<https://youtu.be/JKptSuwuAfM?si=QMqju1-ywozPsd7r> - Stone Material Tutorial

<https://youtu.be/zPDPVmLc7lY?si=HPGczXwU3plEjgim> - Layout of Street (kind of more like inspiration rather than following 100%)

<https://www.youtube.com/watch?v=hWn48LnrYIA> - Neon Sign Tutorial

[https://youtu.be/L\\_geIiJveAE?si=ZsneYu2KIriONEsx](https://youtu.be/L_geIiJveAE?si=ZsneYu2KIriONEsx) - Puddles Tutorial

[https://youtu.be/cqZhdqcBfVw?si=ytpBqOg\\_xJzwk1k3](https://youtu.be/cqZhdqcBfVw?si=ytpBqOg_xJzwk1k3) - Cone Tutorial

<https://www.youtube.com/watch?v=G7Aj62G8AM8> - Street Barrier Tutorial

[https://www.blenderkit.com/?query=category\\_subtree:cityspace+order:-bookmarks](https://www.blenderkit.com/?query=category_subtree:cityspace+order:-bookmarks) - Street Electric Box Asset

City Background was not made by me, but I borrowed it from a friend, so therefore can't provide an online link for reference. You can find more details about the object within my .blend file under "Object\_168".