

# CS 457/557 -- Winter Quarter 2021

## Project #5

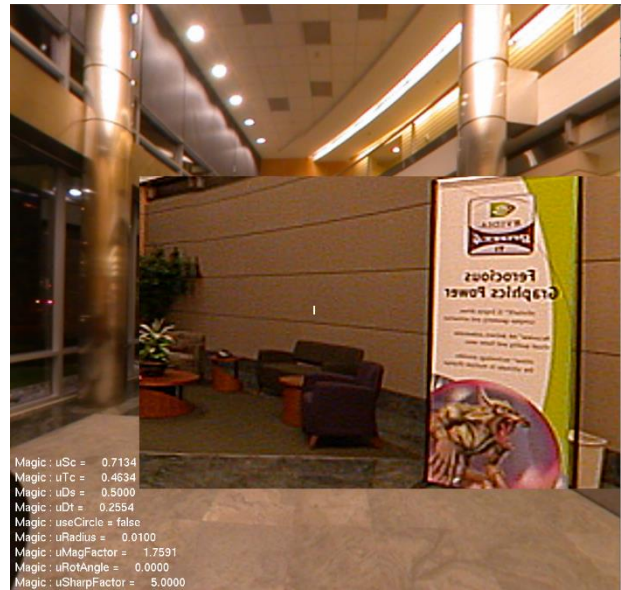
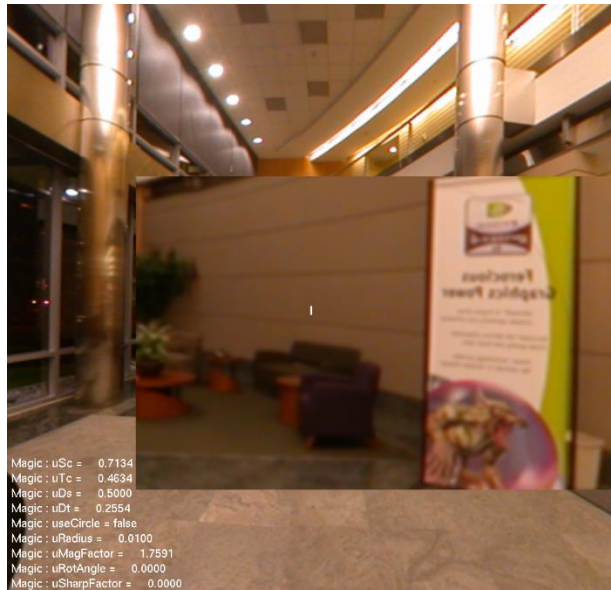
### Image Manipulation in a "Magic Lens"

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- **What I did and explaining why it worked this way:**
  - 1) Use if/else to determine what range I need to do the magnification, rotation, and sharpness.
  - 2) Calculate the magnification then give the result of vec2 to the rotation part to continually calculate the new s and t.
  - 3) After getting the new s and t, put them into the sharpness section to get the final result.
  - 4) Set another model as circle, then use the concept of  $\text{Project1}(s - s_c)^2 / Ar^2 + (t - t_c)^2 / Br^2 = 1$  to get the range I need to filter.
- **Screen shots from program:**





- Video Link: [https://youtu.be/X1kRHZW-x\\_Q](https://youtu.be/X1kRHZW-x_Q)