

67-443 Fall 2020: SceneScape

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(with CJ May and Justin Britton)

About Me

- IS Grad in May of 2021, Minor in Business Administration (fun fact, same degree path as my father)
- Currently working at AWS as a Software Development Engineer, helping businesses move legacy software into the cloud
- Avid traveler and die-hard Steelers fan

What did we build?

- **An app to help those with low vision or blindness navigate the spaces around them**
- We had a background in web accessibility from a previous class, so that user demographic was still fresh in our minds
- There was a personal aspect - some of us had family members who struggled with low vision
- We also wanted to try something completely different, using non-normal methods of interacting with a mobile device

App Features

- Depth sensing - how far the person is from an object or wall using the LiDAR sensor
- Vibrational feedback based on proximity to objects or walls
- Object classification - what is your device pointed at
- VoiceOver integration - speaking the object name and also what mode the app is in
- All processing is on-device (no internet connection needed)

Challenges/Lessons Learned

- Lesson: Using Swift concepts and iOS Frameworks outside of class material means a lot of “just in time” learning
- **Challenge: Using cutting edge AR frameworks + an iPhone that wasn't released until halfway through the semester**
- **Challenge: Division of responsibility while working remotely**
- **Lesson: V1 needs to just work, nothing fancy**
- Lesson: Customer experience is super important

Thank You!

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