

MICHIGAN STATE
UNIVERSITY

Beta Presentation

3D Scene Reconstruction of Vehicle Accidents

The Capstone Experience

CSAA Insurance Innovation

Angelo Savich

Lisa Lipin

Kaan Salt

Varsha Narmat

Wendy Wu

Owen Daprile

Department of Computer Science and Engineering

Michigan State University

Spring 2022



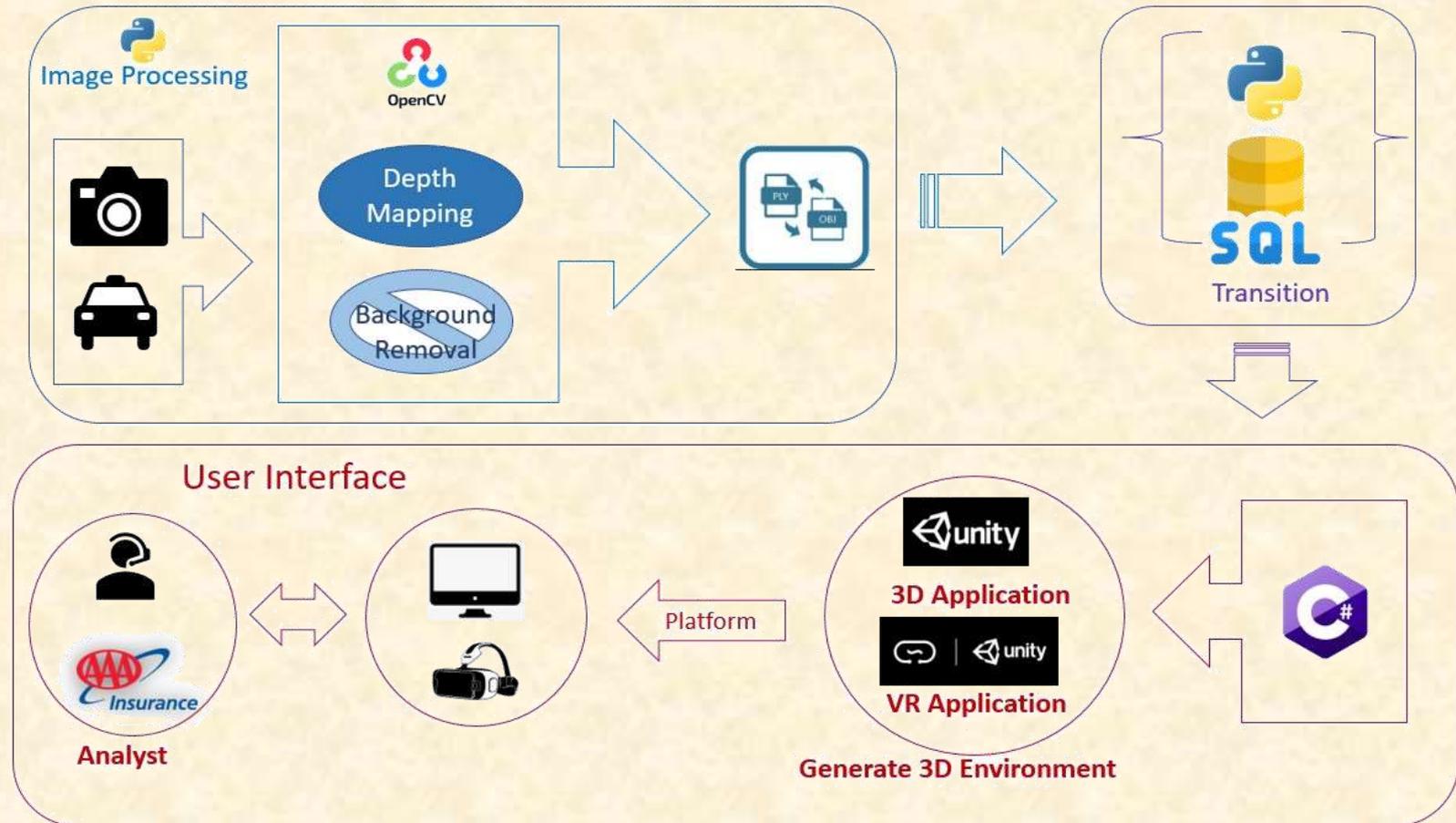
From Students...
...to Professionals

Project Overview

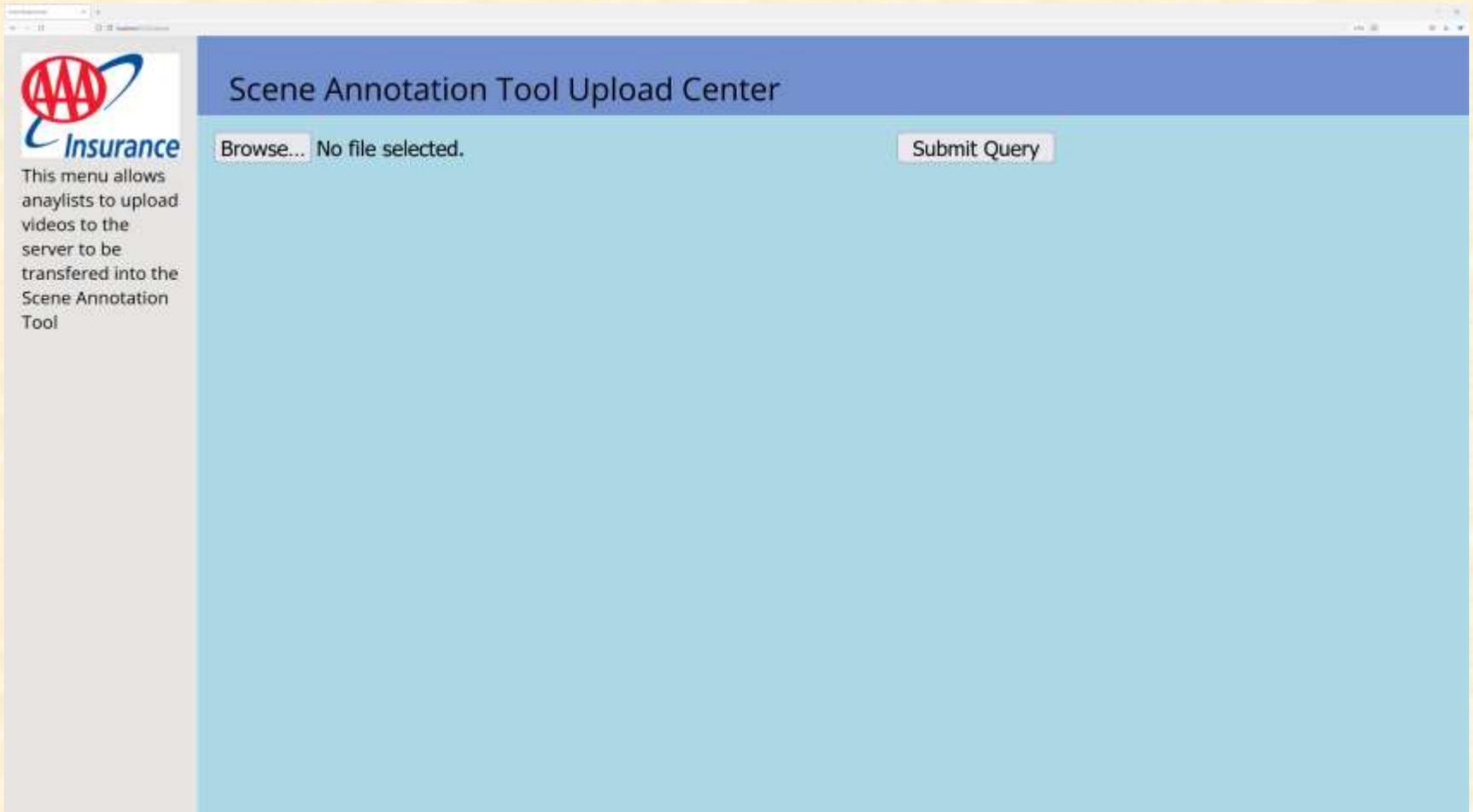
- Recreate 3D model to analyze vehicle accidents
- Annotate damages
- Compare to undamaged vehicle
- Provide comprehensive damage reports
- Aid analysts and customers in discerning next steps



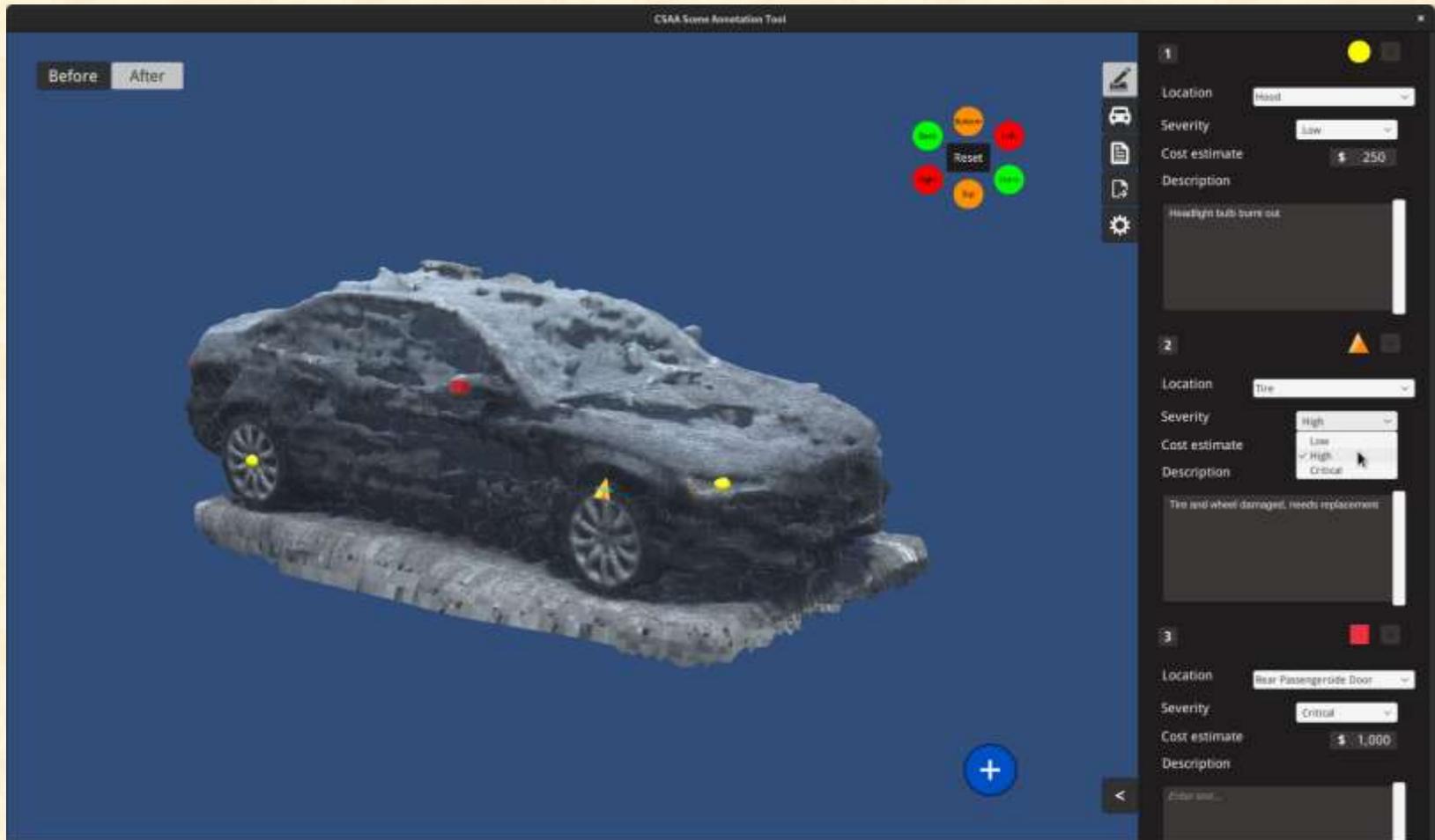
System Architecture



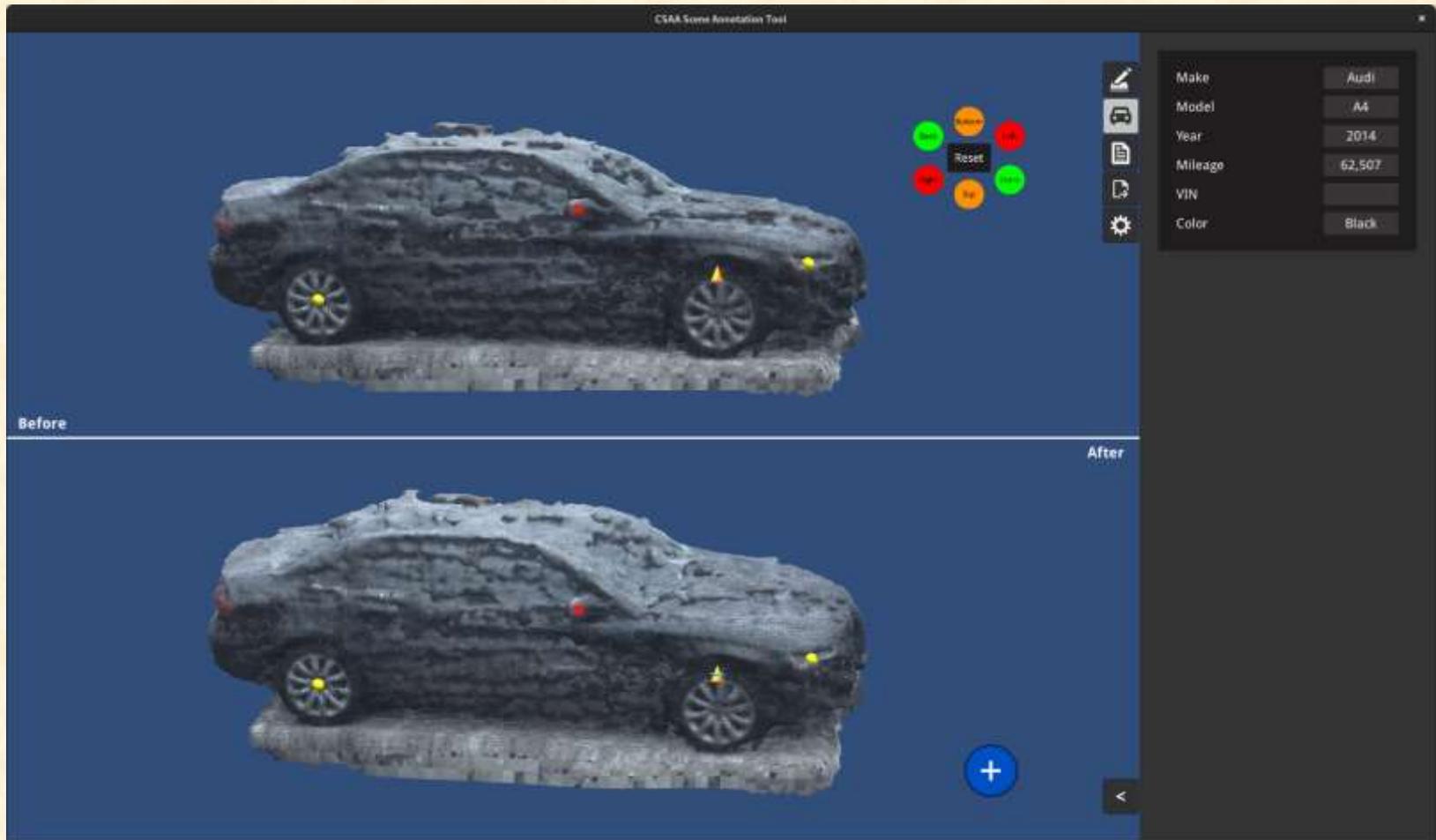
Video Upload System



Before and After View with Annotations Tab



Stacked View with Vehicle Info



VR Interface



What's left to do?

- Stretch Goals
 - Multi-computer sync
 - Back-end UI
 - Remote File Saving
- Other Tasks
 - Improve model quality
 - User Identity for Model Fetch (License Plate)
 - Bug fixes: Rotation, annotations, etc
 - Final Integrations – Back-end UI



Questions?

?

?

?

?

?

?

?

?

?

