**PROJECT SUMMARY:** A virtual reality system to recreate the archaeological experience using data and 3D models from the neolithic site of Çatalhöyük, in Anatolia, Turkey.

**PROJECT OBJECTIVES**

- Develop archaeological VR app containing models of real site.
- Allow manipulation of artifacts/"digging" within system.

**WORKFLOW**

- Digital Archaeologists capture 3D models of dig site and landscape through image-based modeling (computer vision), laser scanning, LIDAR, etc.
- 3D models of site, artifacts, are imported into Unity3D game engine, where:
  - Interactions and display are built to allow analysis and discovery within the application.
  - Application is built with Oculus Rift as head-mounted-display, and Razer Hydra tracked wands as input devices.

**DESCRIPTION**

- Can view information from existing archaeological database contextually, in 3D space, for objects documented by field archaeologists.
- Allows for measurement, analysis of artifacts and land on-site.

**FUTURE WORK**

- Will be tested in user study to explore and discover improvements in performing archaeological tasks in 3D environments.
- Will be ported to other systems, such as the DiVE and desktop interfaces.

Acknowledgements: Thanks to David Zielinski and Nevio Danelon for help with technical and modeling aspects of this project.