

# Creating a 3D Building Information Model (BIM)

## Abstract

The purpose of this project is to design a 3D model from laser scan point cloud data, using the Trimble TX8 laser scanner. The location scanned is the Ferris State University welding lab to create the 3D Building Information Model (BIM). This data allows the user to manage, operate, and maintain the scanned interior area, allowing multiple users and disciplines extract needed information from a single model. Our team processed the laser scan data using Trimble RealWorks software. After developing the BIM, we created a high definition video fly through within the 3D model.

## Project Location



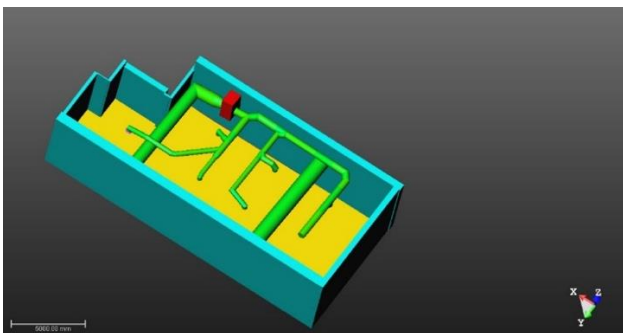
## Registration of the Point Cloud



## Point Cloud



## Modeling



## Acknowledgment

Our group would like to thank everyone who helped us with completing this project. We would like to specially thank: Academic Adviser: Professor Deshpande and Professor Barsai, Technical Support for Trimble RealWorks software: Jason Hayes, and Industry Professional: Mark Tenhove from Michigan Surveyors Supply

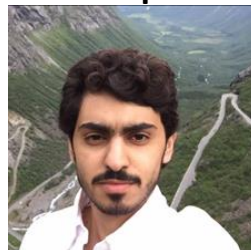
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