Thesis Defense

Computer Science Master's Program

"**Data Analytics System for Farm Machinery Management**

By **Morgan Swanson**

Abstract:

Farmers across the world rely on heavy equipment like tractors, combine harvesters, and seeders to grow crops. This machinery is becoming more complex and the farming companies are growing in scale, which creates an opportunity for a digital information system for managing the fleet. While there are communications standards for agricultural equipment, there has not yet been a real-world experiment assessing the availability data relevant to software-based management. In this work, data from agricultural equipment is collected using modern standards and the results are analyzed to provide insight into the viability of a software-based equipment management system. In addition, a remote data collection system is prototyped which enables cost-effective data acquisition at scale.

Date: Thursday, June 6th, 2024
Time: 2:00 PM – 4:00 PM
Location: 14-255
Zoom: https://calpoly.zoom.us/my/fkurfess
Committee: Dr. Kurfess, Dr. Sadek, and Dr. DeBruhl