Carbon Sequestration Prediction
Team Members: Cindy Manikowski, Caleb Myhra, Jean Eckelberg, Brandon Snyder, Quintin Fitzgerald
Sponsor: GrandFarm

Objectives:
Retrieve satellite data to use with drone images and field samples to determine models to predict carbon sequestration values.

Challenges:
- Adaptation of new technologies (FarmVibes, GDAL, GIS)
- New data formats (geospatial data, raster files, shape files)
- Catching up two new technical leads with the project
- Azure finance management for storage and VM’s
- Multiple parties with an initially opaque goal.

Tech Stack:
- Python
- Microsoft Azure
- Microsoft FarmVibes
- PostgreSQL
- Google Earth Engine
- GDAL

Deliverables:
NDSU Agriculture:
Model prediction accuracy

Grand Farm:
PostgreSQL database & GitHub repo

Microsoft FarmVibes:
Feedback Document