Corn Yield Calculator CSE 6242 Team 136

Jennifer Sigmon

Cory Knepper Cameron Corbridge Samantha Schwarz

Chris Murphy

What?

Tool for predicting county average corn yields. DASH UI application - similar to a calculator.

Enter in your location get a prediction for your corn yield in seconds!

Why?

Farmers and communities need a tool to predict what local corn yields will be. Understanding and benchmarking county yields shapes investment and business decisions for:

- Farmers
- Local government
- Grain Elevators

How?

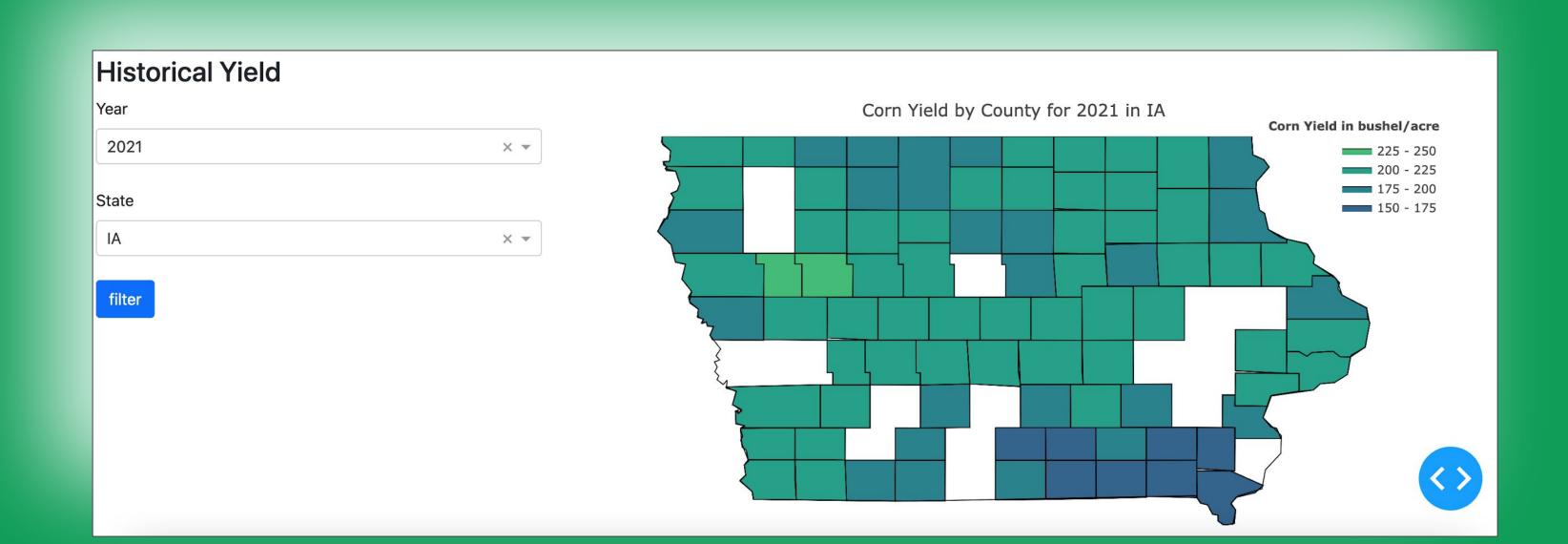
Features:

- Agricultural
- Weather
- Economic
- County

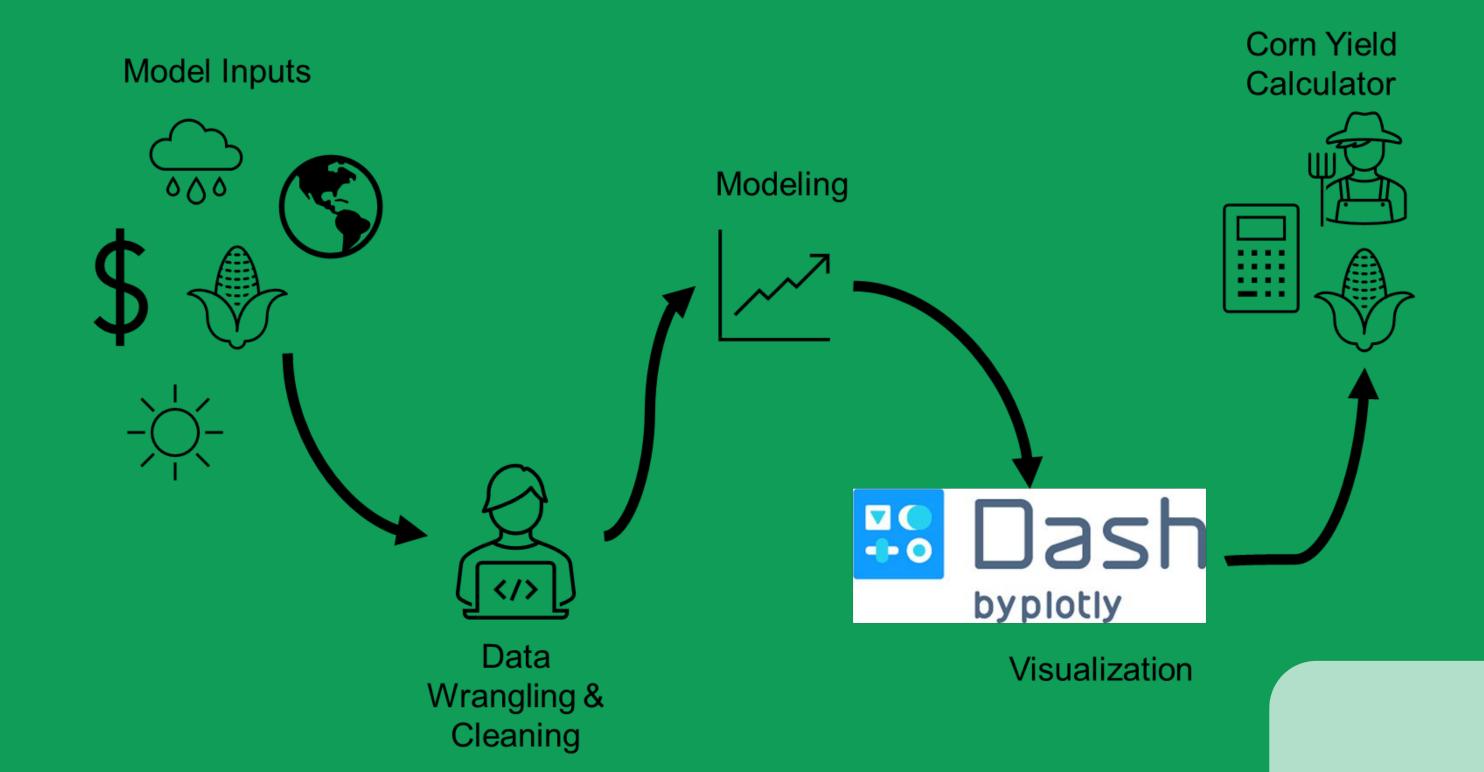
These features come from web sources like NASS fed through API

Final Model:

- XGBoost ~ RMSE 20Bu/a
- Top features were rain & count of extreme temp days
- Scored all counties available by all parameter options, 7M rows







Other Yield Predictions

- USDA corn yield samples
- Satellite imagery and remote sensing
- Kernel counting