Introduction/Background/Motivation

Did you know that the pig harvesting industry can involve a lot of statistical analysis? Gro Master's mission is to help farmers predict exactly when their pigs will be appropriate weight for market. As it turns out, pigs can actually be too heavy for market and get penalized (being worth less), while pigs that are too light for market are a waste of potential profit. Farmers need to be able to control their pig weights, as well as easily view and predict them. Gro Master helps them accomplish this with their mix of hardware and software. At the farms, the sorters record pig weights and automatically assigns pigs to different feeding pens. Their web app helps farmers view their pig statistics and predict market time as early as possible.

Farmers also requested an app that let them remotely control their pig sorters. The pig sorters have several basic functions, originally handled on-site with the raspberry pi hardware:
- On/off
- Open/close gate
- Other proprietary techniques

We incorporated this functionality into interactive forms in the new website.

Conclusion and Acknowledgements

Gro Master's top priority for the future should be securing more clients and obtaining more complete real-world data. They simply lack clean, consistent, and labelled data that’s necessary to test and improve their forecasting. This would require acquiring more clients and creating a formal TOA to gather their data. They have been doing a great job promoting their sorting machines and developing specialized models for pig weight forecasting. We’ve developed a more maintainable codebase and implemented customer feedback into our website. We thank our mentor BJ, Kevin, and Dr. Schinckel for guiding us throughout the various tasks and challenges of this project.