**ENSE 483 – Project Ideas**

Below are three topics of interest for the ENSE 483 project (in no particular order):

* **DAIRY UC 2.4: REMOTE MILK QUALITY**The system involves analyzing milk samples with RFID tags alongside temperature and homogeneity sensors. Sensor readings are fed into a gateway device that forwards them to the cloud platform for analysis and display for operators.
* **VEGETABLE UC 4.1: CITY FARMING LEAFY VEGETABLES**The application attempts to enable farming vegetables in cities. The system includes a variety of sensors that measure parameters of growing leafy vegetables that are forwarded to an IoT cloud platform. The platform includes inputs for operators to control system parameters such as climate, light, and fertigation.
* **MEAT UC 5.1: PIG FARM MANAGEMENT**The application involves automation of pig farm monitoring. RFID tags are used to identify pigs and various sensors track parameters such as humidity, temperature, food consumption, water consumption and weight of pigs. Information from sensors is fed into an IoT cloud platform and made available to farmers and other operators via a dashboard. The farmer adjusts parameters for pigs based on the analyzed data.