

sdmay23-17: CySecAgri: Cybersecurity for IoT-enabled Precision Agriculture

Week 2 Report

September 30 - October 7

Team MembersDavid Wolfe — *IoT Networking*Joe Hunter — *Frontend Application*Tom Ruminski — *IoT Networking*Rian Lamarque — *Cloud Infrastructure*Elijah Hanson — *Cloud Infrastructure*Syed Al-hussain — *Front End Application***Summary of Progress this Report**

-Researched:

Security from the cloud

Physical layer options for perception layer

-Gained access to AWS account

-Started making the flutter app

-Software prototype of base station

Pending Issues

Need a replacement for IoT devices since we are no longer able to use the graduate student's

Plans for Upcoming Reporting Period

Advisor/Client assigned us a presentation for our next meeting

For the cloud team: Get some infrastructure deployed to work with the existing python prototype. Also begin research connecting cloud to application.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
David Wolfe	Developed a prototype base station using python and a queue structure to process sensor readings and format them for our cloud setup	3	
Joe Hunter	Set up team's GitLab and created a barebones flutter app that increments a counter when you press a button.	4	
Tom Ruminski	Researched physical layer options for sensors	3	

	(LoRa, BLE, wifi, etc.), researched link layer protocols for Node-Base Station communication. Identified open source I/O LoRaWAN options		
Rian Lamarque	Requested access and logged into account to begin exploring services in AWS. Continued research on available services and looking into past project work.	3	0
Elijah Hanson	Looked into security features that can be handled by the cloud such as MFA and firewalls. Also obtained login credentials for the AWS account looked into security services listed there.	3	0
Syed Al-hussain	Began watching flutter tutorials and worked on figma designs for the application	3	

Gitlab Activity Summary

Nothing to report.
