

## EE 491 Weekly Report

### DEC15-10 IVend Product Delivery Sensor Design Analysis

**Advisor: Dr. Zhengdao Wang**

**Client: Fawn Engineering**

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#### Members (roles):

Tyler Westberg (Team Leader)

Jacob Olstad (Communication Leader)

Tim Howell (Webmaster)

Steve Dorenkamp (Webmaster)

Seth Schmidt (Concepts Holder)

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#### Weekly Summary:

This week was dedicated to working with more LEDs and detectors. A meeting was also held with Dr. Wang to discuss line of sight and other possible things that could cause missed detection.

#### Group Meeting 9/16

Duration: .5 hour

Members: Jacob Olstad, Steve Dorenkamp, Tyler Westberg, Tim Howell, Seth Schmidt, Dr. Wang

Notes:

This meeting was held to discuss line of sight with Dr. Wang and to decide on how we should move forward. We discussed possibly using audio waves over light.

#### Group Meeting 9/10:

Duration: 3 hour

Members: Jacob Olstad, Steve Dorenkamp, Tyler Westberg, Tim Howell, Seth Schmidt

Notes:

This meeting was held to continue testing using more emitters and detectors. We also used this time to discover how many pulses would be needed by the detectors to see a valid signal.

#### Plans for next week:

1. Meet with Fawn

2. Develop timeline and plan to move forward

**Members Contributions:**

Tyler Westberg: Biweekly meeting with Dr. Wang to discuss the progress of the project and team meeting to continue testing and evaluating the use of more emitters and detectors.

Jacob Olstad: Meeting with Dr wang and team meeting working with more detectors and emitters.

Tim Howell: Team meeting with Dr Wang, testing the frequency that is accepted by the detectors and testing the number of pulses that can be missed and still appear as a valid reading

Steve Dorenkamp: Team meeting with Dr Wang and researching how to incorporate more hardware with the current system

Seth Schmidt: Meeting with Dr. Wang, team meeting about using more emmitters/detectectors

**Project Contributions:**

<u>Member</u>	<u>Time this week (hrs)</u>	<u>Time to date (hrs)</u>
Tyler Westberg	3	53.75
Jacob Olstad	4	67.5
Tim Howell	3	52
Seth Schmidt	3	47.5
Steve Dorenkamp:	3	41