

Solar Sailors

Meeting Minutes from 09/30/2020

Members in attendance:

Adriana Oliveira (Team Member)

Steve Szablya (Sponsor)

Brady Jerome (Team Member)

Feng Li (Advisor)

Lukas Vermeulen (Team Member)

Brian Johnson (Teacher)

Nickolas Borek (Team Member)

- Meeting Started at 6:05 PM
- Changed our microcontroller to an Arduino Mini
 - Cheaper, smaller, and works for our needs
 - Can interface better than our previous microcontroller
- Adriana showed a diagram for her two-sensor idea
 - Face the sensors North to South to get a full view of the rising and setting sun
 - Take the average of the two sensors to get their value
 - Trouble with the overlap
 - Possible fix being a plastic divider, but need research
- Lukas reviewed his created circuit
 - Voltage divider into the microcontroller
 - Brought up the question of needing a frequency input for the varying wavelengths
 - Dr. Li later said that this would be too difficult and not needed
- Discussed the weather patterns where the pyranometer is planned to be used
 - Goes through dry and rainy seasons
 - Usually not cold, but has dropped in temperature on rare occasions

- Can use NASA's irradiance data
- Discussed future tasks
 - Gantt Chart
 - Logbook/Portfolio
 - Need personal Logbooks
- Q: Is our 150° viewing angle set, greater or gradually greater, or lesser or gradually lesser than the given angle?
 - A: We are not sure. More research needs to be done.
- Meeting Ended at 6:55 PM