

Minutes:

11 March 2025 :

Attendees: Ryan Farrell , Vivek Chauhan

Main Deadline up-coming: Literature Review (4th April)

Topics:

- Discussed Planning Tools for further logistics, to allow the planning of our Project progress to deadlines.
 - Approach to reading research papers and collecting lists of papers. (Aim for ~30 ish Papers)
 - Making a Gantt chart on Doc/google sheets
 - Questions List on Slack Canvas
 - Read over the modules for Literature Review by Friday 14th April
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14 March 2025

Attendees: Ryan Farrell , Vivek Chauhan, Talia Xu

Supervisor meeting

Topics:

- Wireless comms -> active (wifi, BLE, LiFi), passive (rfid, ambient backscattering) splits into rf/alb applications
 - **RF**: Passive rf backscattering. What technology? Application? Fundamental constraints?
 - **ALB**: Marco Zuniga, qing wang, Chen Ren Xu, Domenicu . G, Wen Hu (look at papers from them)
 - **LIFI**: Harald haas
 - Wifi backscattering: Shyam Gollakota
 - 1 paper on Lifi (question, what is advantage of ALB)
 - 10 papers abstract, 3-5 more depth (minimum)
 - 1 survey each for rf and alb -> published after 2023
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18 March 2025

Attendees: Ryan Farrell , Vivek Chauhan

Main Deadline up-coming: Literature Review (4th April)

Topics:

- Discussed each member progress between last team meeting
 - Set up next meeting to work through project plan and scope (Objectives & aims) -> 20/3/25 4pm to ~6:30pm
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21 March 2025

Attendees: Ryan Farrell , Vivek Chauhan, Talia Xu

Supervisor meeting

- Don't worry about perfect draft for lit review, just use to come up with research objectives
 - Research report different to engineering report
 - Reliability of energy source - i.e. during cloudy/rainy days etc, and under variable lighting conditions (sun position in sky, clouds etc)
 - Sun alignment very important (very directional)
 - Location of sun
 - Tracking -> low power, minimum moving parts/power consumption (algorithm, motor/electronic, weight optical etc., power budget, battery, mixed system etc
 - And multi Nodal transmission setup
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14 April 2025

Attendees: Ryan Farrell, Vivek Chauhan, Talia Xu

Supervisor Meeting

- Discussion focused on **component and part selection** for each subsystem.

- Decision to **finalize and send off part orders** for the initial hardware setup.
 - Ensured all selections aligned with system requirements and project objectives.
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16 May 2025

Attendees: Ryan Farrell, Vivek Chauhan, Talia Xu

Supervisor Meeting

- Reviewed progress on the **initial circuit design report**.
 - Discussed how each team member would **approach their subsystem design** within the overall architecture.
 - Emphasis on ensuring subsystem integration and defining **clear subsystem boundaries** for testing.
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13 June 2025

Attendees: Ryan Farrell, Vivek Chauhan (*online*), Talia Xu

Supervisor Meeting

- Conducted an **online discussion** regarding tasks for the **semester break**.
 - Vivek to focus on **motor subsystem testing and setup** once components arrive.
 - Ryan to continue **developing transmission architecture** for system communication.
 - Agreed to maintain regular updates through shared logs or messages
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25 July 2025

Attendees: Ryan Farrell, Vivek Chauhan, Talia Xu

Supervisor Meeting

- Short follow-up meeting discussing the **technical report** structure.
 - Clarified approach for **writing and presenting subsystem designs**.
 - Confirmed scope and expectations for the **final project phase**.
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8 August 2025

Attendees: Ryan Farrell, Vivek Chauhan, Talia Xu

Supervisor Meeting

- Discussion centered on **part delays** and their impact on testing timelines.
 - Agreed on **adjusted milestones** to accommodate late deliveries.
 - Re-evaluated fallback testing plan if further delays occurred.
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22 August 2025

Attendees: Ryan Farrell, Vivek Chauhan, Talia Xu

Supervisor Meeting

- Acknowledged upcoming **Systems Week** workload and limited availability.
 - Discussed strategies for **managing project progress** during this period.
 - Planned to resume testing and integration work immediately after Systems Week.
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5 September 2025

Attendees: Ryan Farrell, Vivek Chauhan, Talia Xu
Supervisor Meeting

- Reviewed overall project progress and testing outcomes.
 - Ryan reported progress on **transmission system setup**.
 - Vivek updated on **azimuth motor subsystem**, including **LDR and photodiode integration**.
 - Supervisor confirmed both subsystems were on track for the upcoming report stage.
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Post-September 2025

Attendees: Vivek Chauhan and Ryan Farrell
Team Meetings (Peer Progress Updates)

- Continued independent team meetings without supervisor involvement.
- Focused on **mutual progress updates**, troubleshooting subsystem issues, and synchronizing tasks across **motor control and transmission** domains.