Meeting Date	Attendees	Notes
2025-01-24	● Bridgette Hunt, ● Aadil Shaji, ● Jeena Javahar	● We discussed the distribution of work in the literature review process and established our methods for organizing our findings to ensure we do not end up unnecessarily reviewing the same studies as part of the review. ● Additionally, we touched on the topic of the final implementation and what we would be interested in delivering. Our current intention is to develop a computer vision system that uses human-pose estimation to identify rock-climbing positions for a given set of contact points. ● Action Items: Add a 2 line description of the paper, identify useful implementation details as it may apply to our project
2025-01-31	Asynchronous	Read selected papers and compiled findings in a shared document
2025-02-07	Asynchronous	Read selected papers and compiled findings
2025-02-14	● Bridgette Hunt, ● Aadil Shaji, ● Jeena Javahar, ● Hamza Muhammad Anwar	Reviewed selected papers as a group. Findings revealed that all recent papers rely on deep learning techniques since human pose estimation is highly complex and requires significant amounts of real world data. Discussed task distribution for the literature review. Action items: Read papers prior to 2014 and distill the pipelines used before deep learning. Next meeting target: Create an image processing pipeline for our use case
2025-02-18	● Bridgette Hunt, ● Aadil Shaji, ● Jeena Javahar, ● Hamza Muhammad Anwar	Discussed three major traditional approaches, Pictorial Structures, 3D Pictorial Structures and Tree-structure model. All were similar in the high level concept used which was creating a network representing the human body and computing estimations based on that. Discussed how to implement these in our own project, since writing the pictorial

		structures model from scratch was unfeasible. Decided to improve on the existing Calvin detector and tailor to our use case.
2025-02-22	• Bridgette Hunt, • Aadil Shaji, • Jeena Javahar, • Hamza Muhammad Anwar	Finalized the major papers in the literature review. Outlined the literature review Designated sections to each team member for completion
2025-02-24	Asynchronous	Editing and review of deliverable, submission
2025-02-28	• **TA Omar** • Bridgette Hunt, • Aadil Shaji, • Jeena Javahar, • Hamza Muhammad Anwar	Discussed the literature review and planned approaches for improvement namely preprocess TA approved of literature review in general but requested that a flowchart representing the system pipeline be created for the final report Team temporarily focuses on the upcoming midterm.
2025-03-07	• Bridgette Hunt, • Aadil Shaji, • Jeena Javahar, • Hamza Muhammad Anwar	Preparing for next steps. Deadline to complete technical implementation set to March 28. Teammates take on the task of investigating and experimenting with approaches to improve the Calvin detector. Hamza and Bridgette investigate preprocessing improvements Jeena and Aadil investigate improvements to the pipeline and running the calvin detector.
2025-03-14	• Bridgette Hunt, • Aadil Shaji, • Jeena Javahar, • Hamza Muhammad Anwar	Discussed updates: Preprocessing techniques: ERGSAN presented Changes to existing pipeline: replace upper body detector which relies on facial detection to create a bounding box using experimental sift clustering technique Calvin pose estimator tested, it works with the example images provided by the authors.

2025-03-21	● Bridgette Hunt, ● Aadil Shaji, ● Jeena Javahar, ● Hamza Muhammad Anwar	ERGSAN implemented. Clustering technique updated to use gaussian distance functions and similarity thresholding, successful in localizing the entire climber in frame. Calvin pose estimation proves extremely difficult to integrate into the new pipeline. The detector is old and no longer maintained, function calls generate several errors as a result. Modification of the C and C++ files in the Calvin pose estimator yielded disastrous results, even with the example images provided with the software by the authors. After long hours of configuration, two teammates are able to run the base code
2025-03-28	● Bridgette Hunt, ● Aadil Shaji, ● Jeena Javahar, ● Hamza Muhammad Anwar	Team reviewed attempts to improve upon the Calvin lab's pose estimator ● Attempts to augment with HOG feature extraction to no benefit ● No improvements to the Calvin pose estimation pipeline are accomplished ● Diagnosis of the causes of failure
2025-03-31	● Bridgette Hunt, ● Aadil Shaji, ● Jeena Javahar, ● Hamza Muhammad Anwar	The team gets together to complete the implementation package, finalize the pipeline and rehearse a presentation for the demo.