

CV PROJECT WEEKLY UPDATE

Week 1: February 17, 2025 – February 22, 2025

Work Done:

- Conducted a comprehensive review of relevant academic papers to explore emerging metrics in the field.
- Identified new movement analysis metrics that could enhance our methodology:
 - **Speed of Movement:** Instead of only considering joint angles (e.g., knee bend), we analyzed how quickly joints like the knees and hips move and accelerate. Faster, smoother movements often indicate a well-conditioned athlete, while slower or inconsistent movements may suggest fatigue.
 - **Smoothness of Movement (Jerk):** This metric measures how fluid an athlete's motion is. Jerky or uneven movement patterns may indicate a lack of coordination or the onset of fatigue, which could be critical in assessing performance and injury risk.

Planned Activities for Next Week:

- Continue the investigation into new metrics to further enhance project methodologies.