**CSE 541 Computer Vision**

**Section 1**

**Group 8**

**Project Number 7: Identification of lower extremity injuries from jump-landings videos: A Deep Learning Approach**

**Weekly Report**

**Week 1**

**Introduction:**

Sports like basketball and football involves rapid high-intensity movements which require high stamina, fitness and flexibility. As a result, there are chances of getting lower extremity injuries due to incorrect posture as a result of altered neuromuscular control while playing. Therefore, for early identification of such movements can prevent serious injuries. Our aim is to develop a robust model which helps in identifying such movements.

**Progress Summary:**

We started off by doing the literature survey, which included reviewing recent research paper, A Framework for Biomechanical Analysis of Jump Landings for Injury Risk Assessment [1]. Here, we explored the background of the problem, the important points and angles, for instance knee flexion, which are associated with injuries. The measuring techniques of such point and angles, and the related error score measured using mentioned techniques.

**Next Steps:**

We plan on continuing our literature survey and identifying the dataset features.

**Appendix:**

1. A Framework for Biomechanical Analysis of Jump Landings for Injury Risk Assessment S Sharma, S Divakaran, T Kaya, C Taber, MS Raval - 2023 IEEE 28th Pacific Rim International Symposium ..., 2023. https://ahduni.edu.in/site/assets/files/6912/paper\_38.pdf