**Determining gait abnormalities in runners with patellofemoral pain syndrome using a data mining approach**

*A sneak peak of the project*

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| A close-up of a toothbrush  Description automatically generated with low confidence | Patellofemoral pain (PFP) is one of the most common musculoskeletal injuries experienced by people today. In this project, we attempted to understand various biomechanical features of gait that differentiate those with and without PFP. |

Prior work considers discrete metrics of the gait cycle such as peak values

Diagram

Description automatically generated

Our approach uses principal component analysis to account for the entirety of the waveform

Diagram

Description automatically generated

Methods overview of principal component analysis

Chart

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