SpatioTemporal – OpenPose Models Final Validation

A group of graphs with different colored lines

Description automatically generatedFigure1: Deep Squat OpenPose data over 40 frames when centered on the zero mean and scaled between –1, and 1

A graph showing different levels of performance

Description automatically generated with medium confidenceFigure 2: Training and Testing set of the Spatio-Temporal model Using OpenPose data on the Deep Squat Exercise.

A diagram of a quality scale

Description automatically generated

Figure 3: Distribution of predicted accuracy scores of 22 good repetitions of the deep squat exercise recorded and uploaded by a smartphone.

A diagram of squat testing

Description automatically generated

Figure 4: Distribution of predicted accuracy scores of 22 good repetitions of the deep squat exercise recorded and uploaded by a smartphone.

A group of graphs showing different colors

Description automatically generated with medium confidenceFigure 5: Side Lunge OpenPose data over 40 frames when centered on the zero mean and scaled between –1, and 1

A graph of progress bars

Description automatically generated with medium confidence

Figure 6: Training and Testing set of the Spatio-Temporal model Using OpenPose data on the Side Lunge Exercise.

A graph with green dots and numbers

Description automatically generated

Figure 7: Testing input of 5 correct repetitions of a side lunge exercise on the Spatio-Temporal model using OpenPose data.

A graph with red dots

Description automatically generated

Figure 8: Testing input of 5 incorrect repetitions of a side lunge exercise on the Spatio-Temporal model using OpenPose data.

A group of colored lines

Description automatically generatedFigure 9: Inline Lunge OpenPose data over 40 frames when centered on the zero mean and scaled between –1, and 1

A graph of a training set

Description automatically generated with medium confidenceFigure 10: Training and Testing set of the Spatio-Temporal model using OpenPose data on the Inline Lunge model.

A graph with green dots

Description automatically generated

Figure 11: Testing input of 5 correct repetitions of an inline lunge exercise on the Spatio-Temporal model using OpenPose data.

A graph with red dots

Description automatically generated

Figure 12: Testing input of 5 incorrect repetitions of an inline lunge exercise on the Spatio-Temporal model using OpenPose data.