

The background of the slide is a dark blue gradient. On the left side, there are several faint, semi-transparent technical diagrams, including circular gauges with numerical scales and arrows, and some curved lines. At the bottom of the slide, there is a silhouette of a mountain range under a dark sky.

MOTION CAPTURE AND PHOTOGRAMMETRY DATA COLLECTION FOR ERGONOMIC MUSCULOSKELETAL REPETITION IN A REAL-WORLD ENVIRONMENT

BY BILL CORLETT



Enter text...

sandbox

Export

- take-1
- take-2
- take-3
- take-4
- take-5
- take-6
- take-7
- take-8
- take-9
- take-10
- take-11
- take-12
- take-13
- take-14
- take-15
- take-16
- take-17
- take-18
- take-19
- take-20
- take-20_DEFAULT_W8W.fbx
- Skeleton of Motions
- take-20_DEFAULT_W8W.fbx

Go to exports

Rokoko Motion Capture Software Program



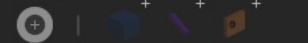
Scene overview

- take-20
- Bill C
- W8W

Live scene objects

- Bill C
- Jared

Add objects



Bill C

Info

Bill C

Filters



Start Live Stream

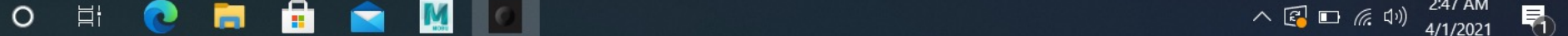
Exporter

0.00 10 20 30 40 50 60 70 80 83.54 s

W8W

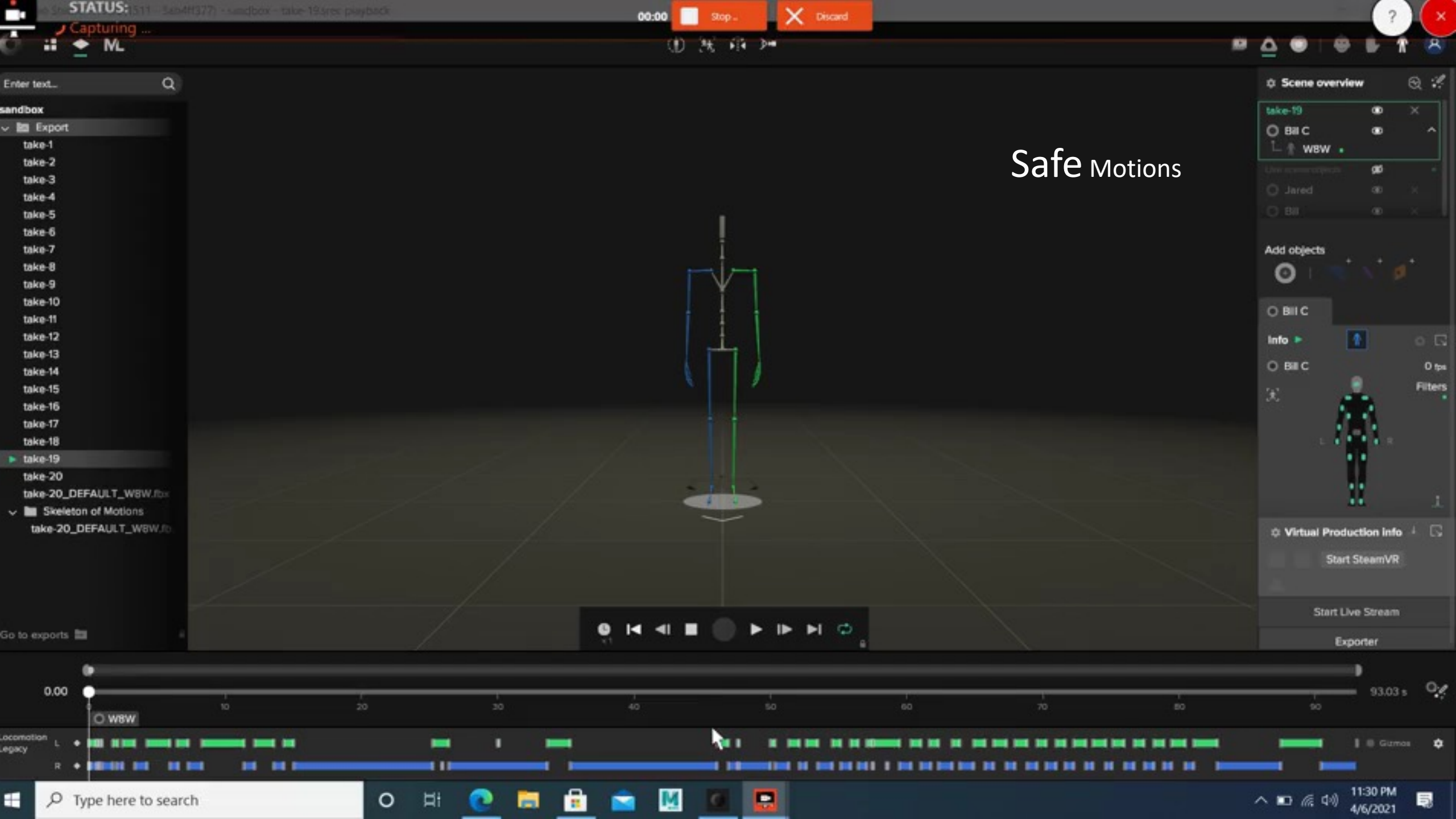


Type here to search

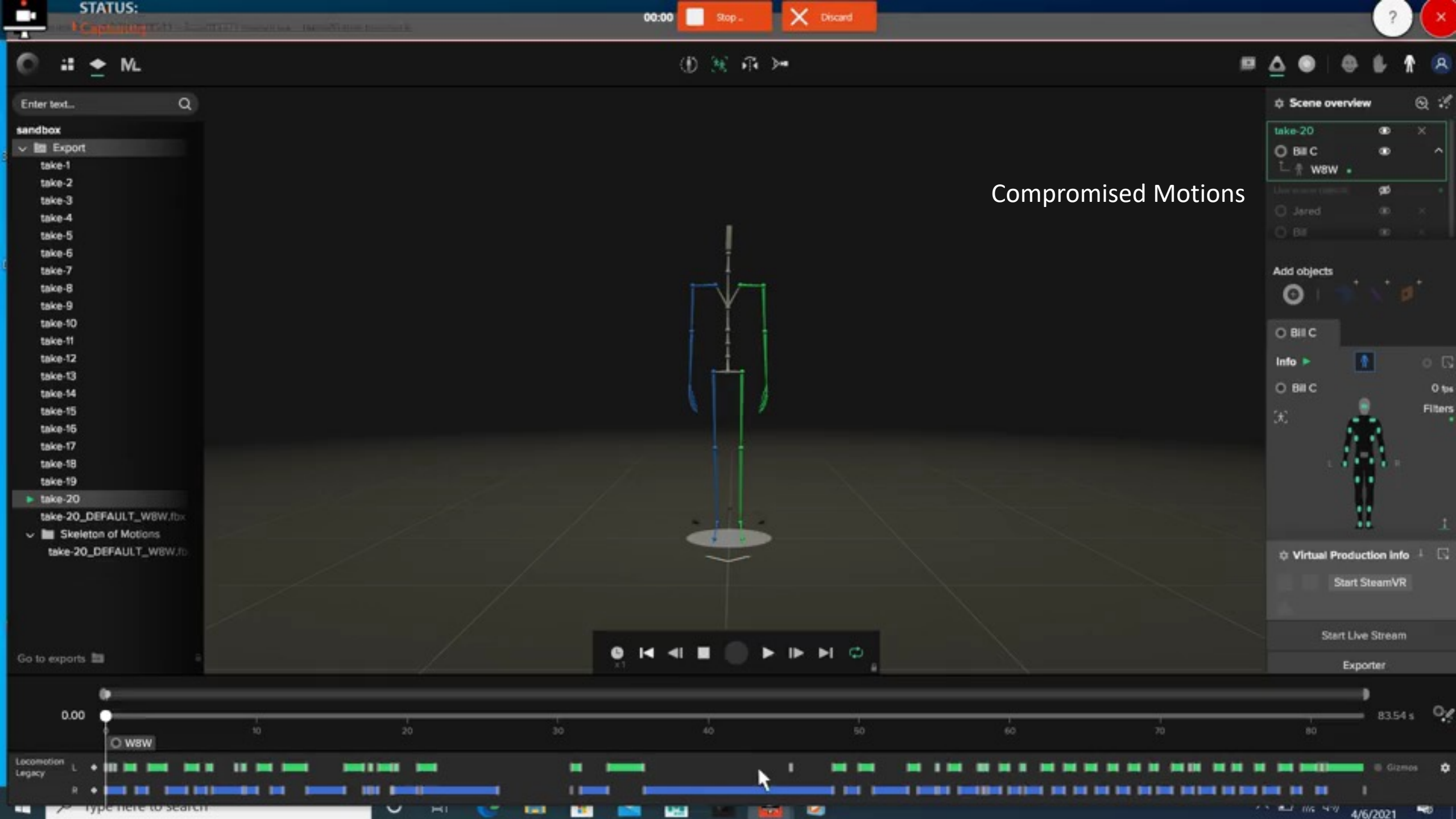




Wheel Barrel and Shovel Motions



SafeMotions



Compromised Motions



Enter text...

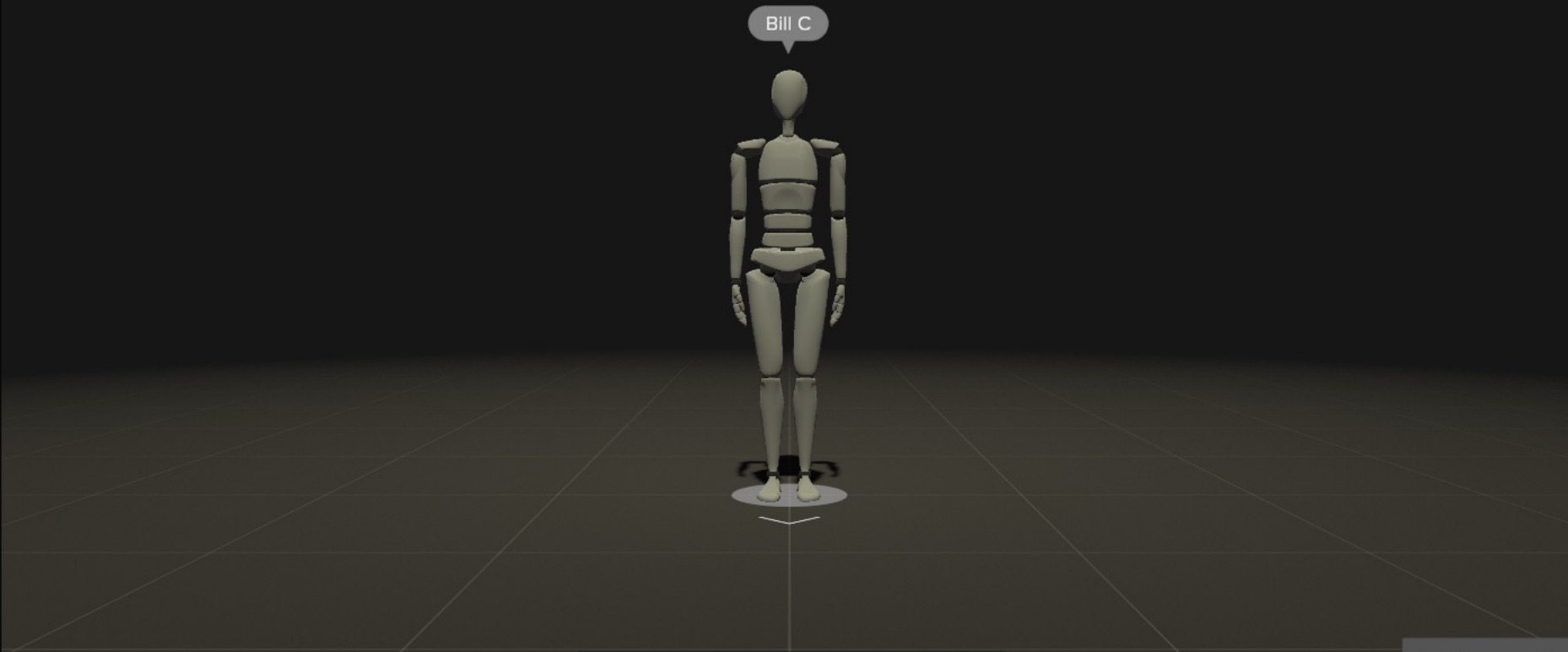
sandbox

Export

- take-1
- take-2
- take-3
- take-4
- take-5
- take-6
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- take-8
- take-9
- take-10
- take-11
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Go to exports

Rokoko Motion Capture Software Program



Scene overview

take-20

Bill C

W8W

Live scene objects

Bill C

Jared

Add objects



Bill C

Info

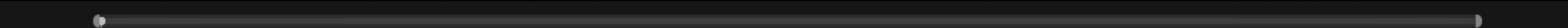
Bill C

0 fps

Filters



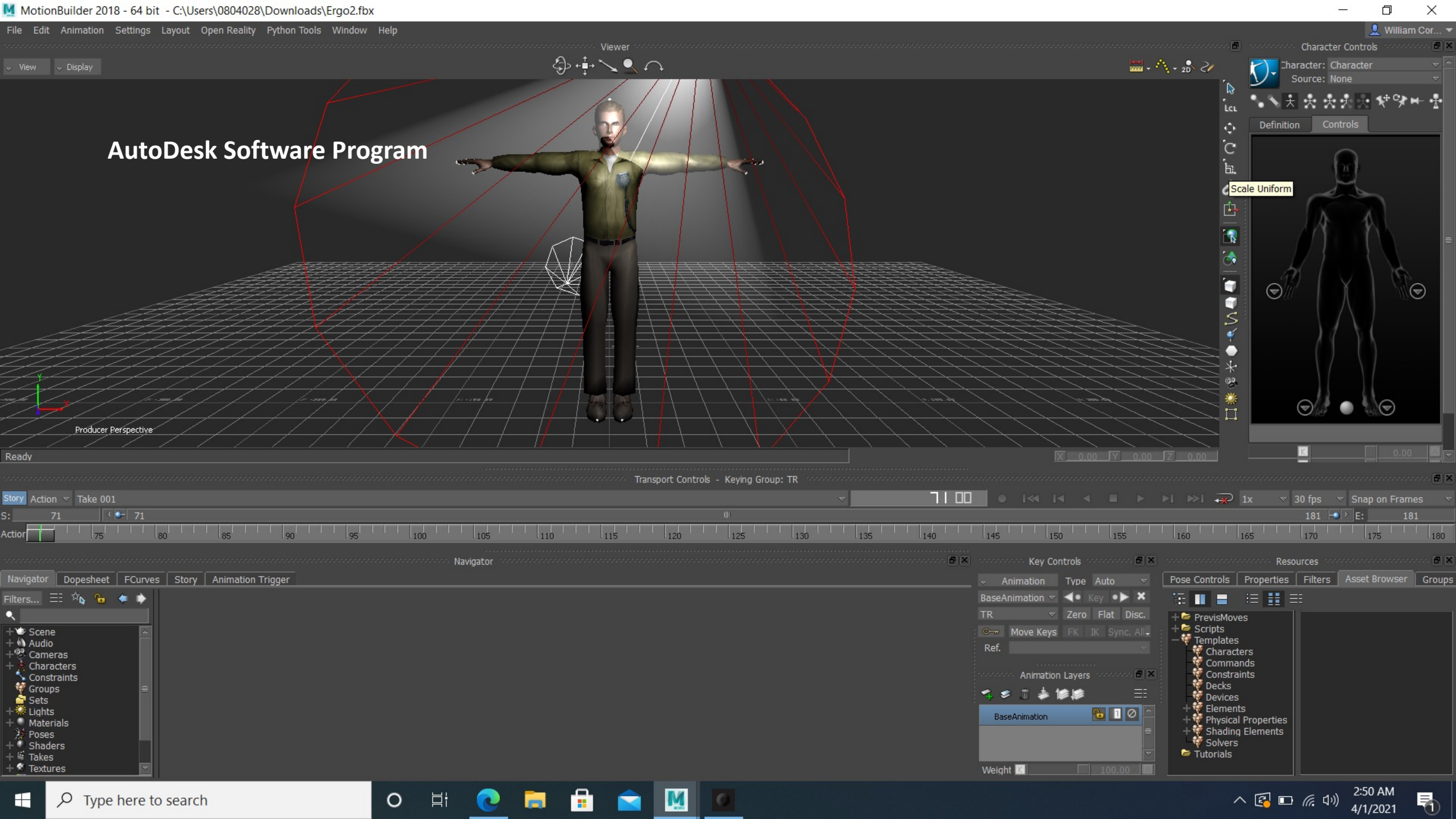
Switch between Studio's neutral character and a stickman exporter

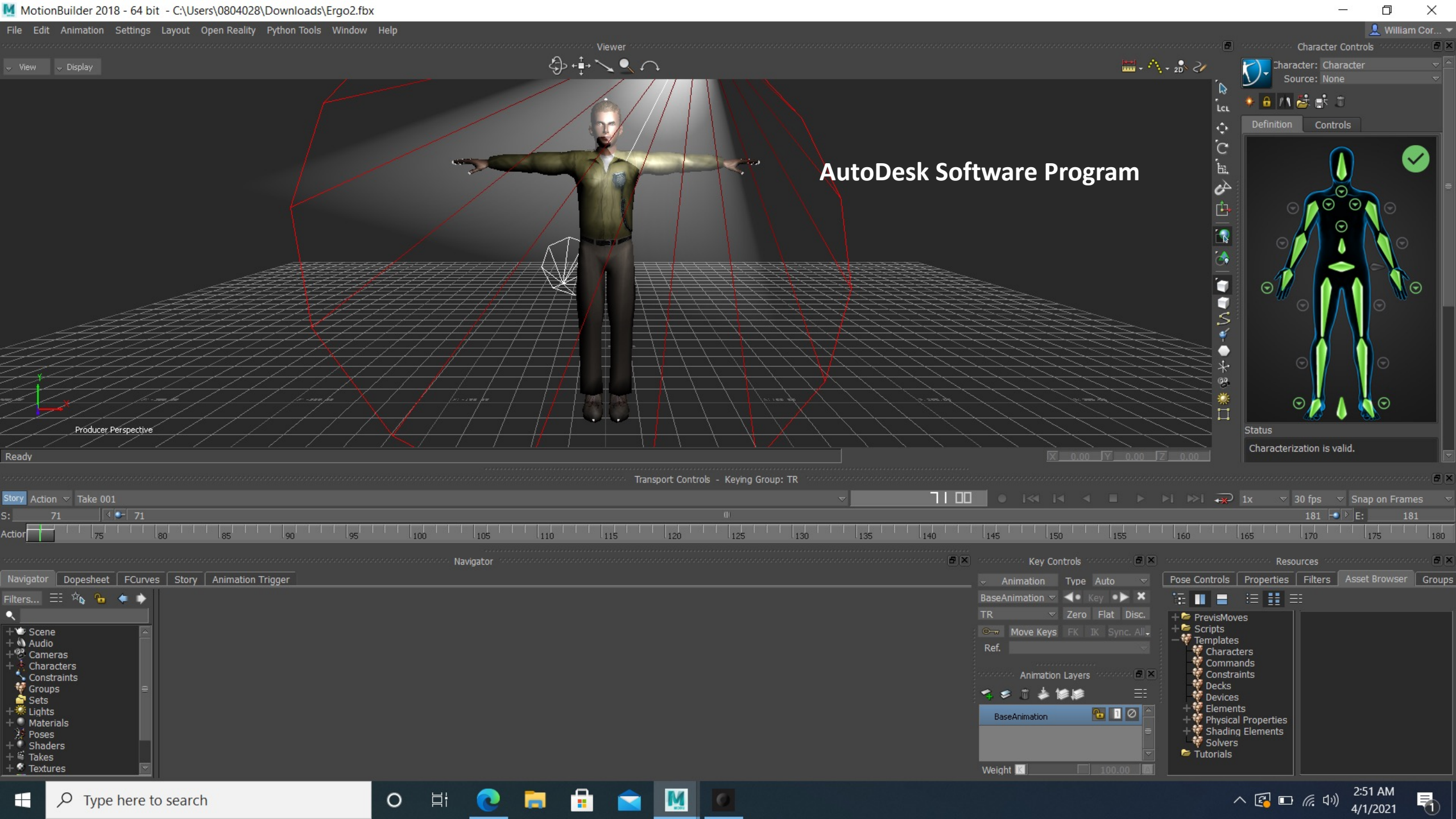


W8W

Locomotion Legacy

Gizmos







**The Kansas Technology Center
Pittsburg State University
Pittsburg, Kansas**



DJI Inspire 2 Drone



Manual Flight of the DJI Inspire 2 Drone





DJI Inspire 2 Drone In Flight





Kansas Technology Center Construction Lab



Photos

Images (443)





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12

Software and Technology Resources

Rokoko Motion Capture Suit

Adobe Premier Pro 2020

AutoDesk

Bentley

DJI Inspire 2 Drone

Drone Deploy

A Special Thank you for the support and knowledge that was shared with me to help establish the footage of this project.

Rod Freeman for bringing his Drone and the technology he used to help establish Footage of the Kansas Technology Center.

Jason Ward for helping with the project by introducing me to a new technology and use for Drone Technology in this world that we live in. Also, for flying the drone to capture photos and data.

Jared Smith and Cole Corlett for wearing the Rokoko Motion Suit while data was collected during the process of the research.