Progress Report 1: Softball Swing Master

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Project Brief

I will be creating a ML classification model revolving around a baseball/softball player's back leg in their swing. This model will classify the back leg's movement into four categories: good pivot, little pivot, too much pivot, and picking up the leg. The SensorTile will be attached at the player's back calf to facilitate this classification, utilizing the accelerometer and gyroscope. After the classification stage, I would like to create a system that records a player's results and sends them to their coach, to help the coach identify players who require more assistance.

Inspiration for this project comes from my experience as a long-time softball player and my specific love of batting. One of the first things a player is taught when learning to swing is to "squash the bug," or pivot one's back leg enough to optimize rotational power, while still remaining in control of one's swing. This movement can be very hard for beginners, especially younger players, to master; therefore, this project aims at reducing that steep learning curve.

Last Week's Progress

- Research
  - UCLA STMicroelectronics, IoT, ML
  - YouTube
- Unicleo-GUI
- Acquired Items
- Setting up Environments

Challenges

- General
  - Time
  - Experience
- Tutorials
  - Previous connection issues
- Overfitting

This Coming Week

- Data Collection
  - Left and Right-handed
  - Variety of Players
- Data Examination
- Model Training

It’s me!

Suggestions/Questions?

Thank you :)