Training Data comes from the NinaPro database with the DB2 dataset. Channel content has been modified slightly to accommodate the difference in electrodes from the database, to our project.

Procedure for preparing patient for sEMG collection:

1. A person's arm with a sticker on it

   Description automatically generatedClean Area thoroughly with either soap and water, or a cotton ball or pad soaked in rubbing alcohol (70% isopropyl is acceptable). Allow the area to thoroughly dry
2. Place the first electrode at the medial, proximal forearm, 2-3cm distal from the elbow crease. Along the same plane as the biceps brachii as shown in the picture below:

1. Place the second electrode at the same location, but 2cm (center to center) away from the first electrode placement

A person's leg with a pair of pills on it

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1. Repeat steps 2-3 three more times, but place the electrode pairs evenly spaced around the proximal forearm, 2-3cm distal from the elbow crease

A person's arm with a device attached to it

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A person's arm with a device attached to it

Description automatically generatedA person's arm with electrodes on it

Description automatically generatedA person's arm with electrodes on their arm

Description automatically generated

1. Place a singular electrode pad on the elbow, connect this to the REF pin of the ADS1299

A person with electrodes on their arm

Description automatically generated



1. Place all other snap leads on the electrodes. The electrode on the inner forearm corresponds to the “Channel 1 differential pair”, and following a lateral rotation around the proximal forearm leads to the order of channels in the standard numerical sense. Note that the training data utilizes 8 channels, and the following mapping must be followed from training data to actual forearm placement:
   1. Channel 4 (training data) 🡨🡪 Channel 1
   2. Channel 6 (training data) 🡨🡪 Channel 2
   3. Channel 8 (training data) 🡨🡪 Channel 3
   4. Channel 2 (training data) 🡨🡪 Channel 4