Arm Wrestling
Analysis and Prediction

NECST Lab, Politecnico di Milano
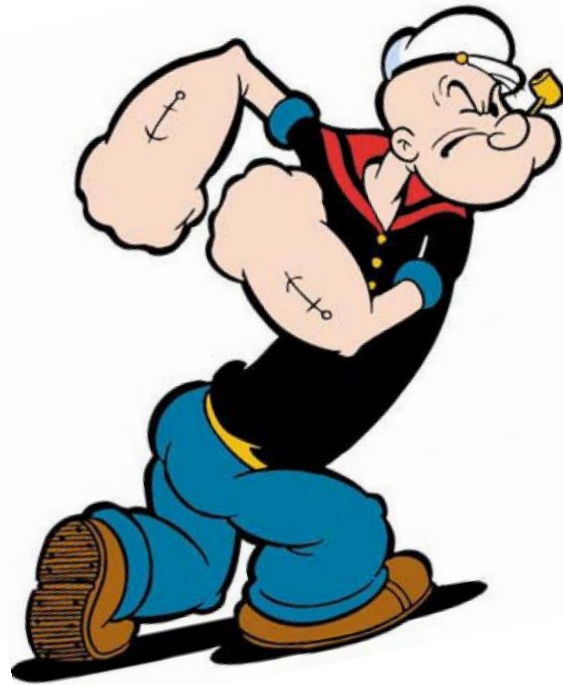*Milan, Italy*

July 15-16, 2016

Our team

We are Matteo, Nicolò, Stephen and Karym, four students at the second year of Biomedical Engineering at the Politecnico di Milano.

Attending the IEIM course with Prof. Santambrogio we got passionate to the subject and together with him we worked on a project which brought us closer to the FPGA world.
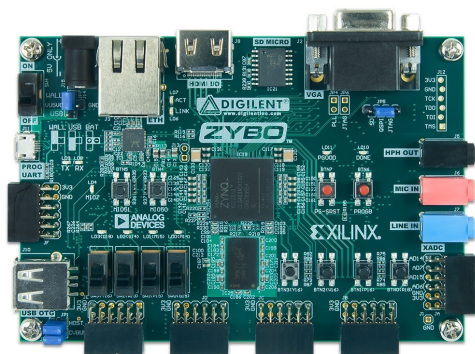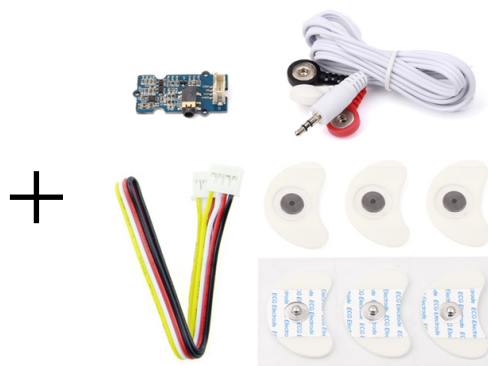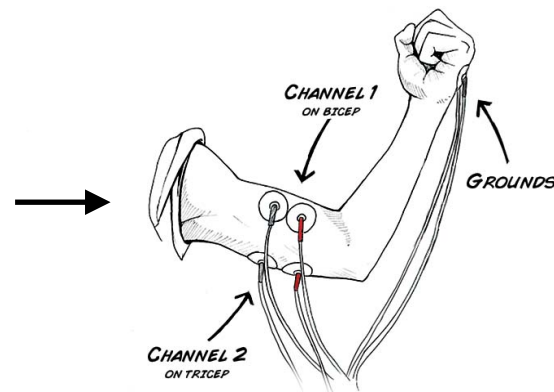
Arm Wrestling

Our idea

FIRST STEP:

Profile the players' strength and endurance,
then make predictions on the outcome of the match

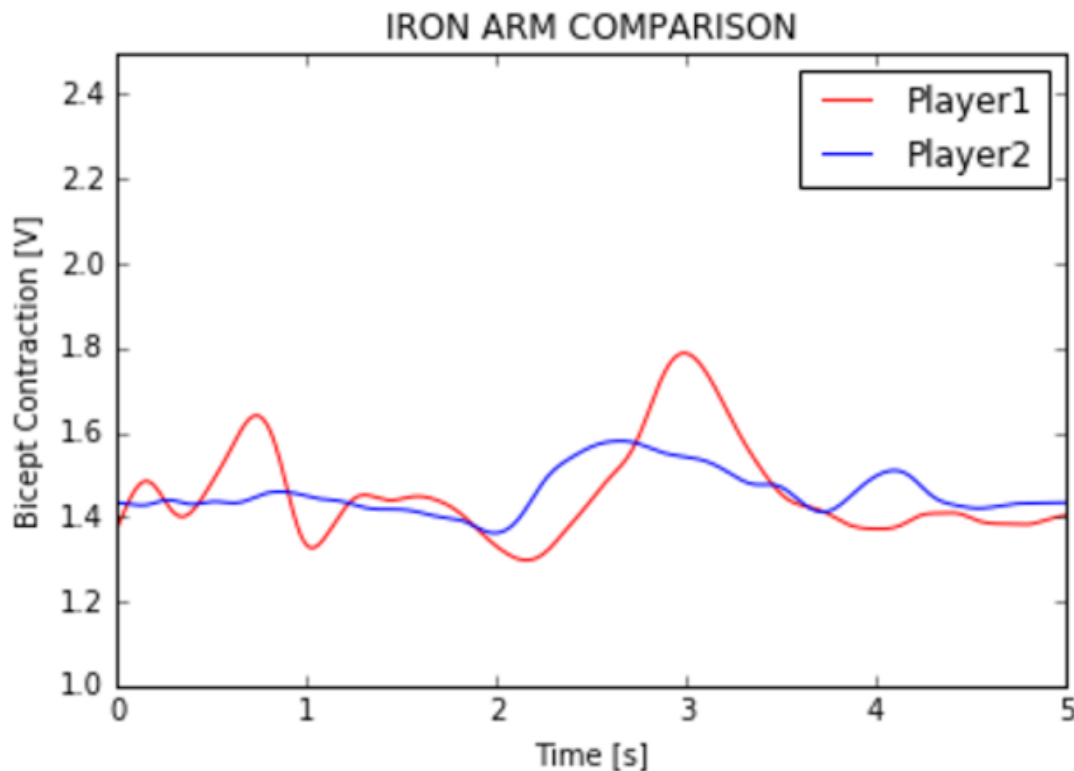**Zybo Zynq-7000 Board**   **+**   **EMG Detector**   **→**

CHANNEL 1
ON BICEP

GROUNDS
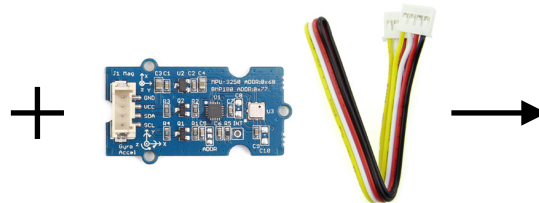
CHANNEL 2
ON TRICEP

EMG results

Player1 --> strenght: 1.78376199026
          endurance: 1.45601222149

Player2 --> strenght: 1.57890863326
          endurance: 1.45782885978

Our idea

SECOND STEP:

Display in real-time on a monitor the current status of the match thanks to the accelerometer

IMU 10DOF

Thank you!

Questions?

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https://github.com/matteogreco/Arm-Wrestling-XPH16