**Synchronization research plan:**

**TODO:**

* Investigate synchronizing options between different limbs on human body (focusing on arms for ease of access and clarity of gait)
* Investigate advantages and disadvantages to synchronizing using different methods:
  + NTP
  + Acoustics
  + Artificial event synchronization (AES) (intentionally shaking arms at the same time to synchronize sensors)
  + Event-specific synchronization (ESS) options
    - Passing under lights
    - Heartbeat
    - Walking vibrations
* Investigate best experimentation methodology to verify.
  + How to obtain ground truth?
    - Utilize combination of optical flow and camera filming? (fast, may have some error)
    - Utilize manual camera investigation done by Ala? (slow, less prone to error)

**Timeline**

**June 1st – August 22nd**

* Investigate existing synchronization literature, share on Dropbox.

**September 1st – September 14th**

* Determine best method for synchronization based on initial investigations:
  + NTP
  + Acoustics
  + AES
  + ESS

**September 15th – October 15th**

* Design, implement, and analyze the results from the chosen synchronization methodology.
* Compare existing methodologies with proposed one in this work.