* **Title**
  + Should convey the issue
  + Quantifying Behaviors Of Canines And People Based On Distance
* **Abstract**
  + Summary of the poster (short)
  + The aim of this research is to measure the distance between the owner and the dog to acknowledge animals’ behaviors related to human. In the meanwhile, developing user-friendly wearables for canine companions and designing positional sensor for data collection.
* **Introduction**
  + Background information to get your viewer interested
  + Include **hypothesis**/research question
  + The relationship with human affects the pet dogs’ behaviors heavily. However, few researches was done because of owner’s lifestyles and various home settings.
  + The positional sensor Pozyx can track the positions of multiple users and distance between each.
* **Materials and Methods**
  + Describe what you did
  + Designed the positional sensor Pozyx to collect the distance between the owner and dog. The sensor can provide the distance between 2 moving objects in the range approximately 10m\*10m\*10m. The sensor can collect data continuously for more than 12 hours. With the ultra-wideband technology, it is possible to achieve indoor 3D positioning with centimeter accuracy. There are 30 pairs of data plan to be collected.
  + Developing user-friendly wearables for canine companies and human. There are 4 concepts being considered: size, weight, inner sensor heat, the way to wear (stability).
    1. Size: The box contains the tag from sensor and power bank for charging.
    2. Weight: The box is restricted by the size of the dog (small dog included)
    3. Inner sensor heat: Since the sensor run for more than 12 hours, the material of box need to have higher melting point than the heat of tag.
    4. The way to wear (stability): The dog is uncontrollable and the sensor is hard to be fixed.

The methods included low-fidelity prototyping with 3D paper models; sketches of the 3D CAD models, etc.

* **Results**
  + Figures or Tables
  + Positional sensor Pozyx
    1. Pictures of tags-Arduino looks like
    2. Pictures of distance data looks like
  + Wearable sensors:
    1. Size: Box shape device (IPhone 7 size)
    2. Weight: Less than 100 g (light)
    3. Inner sensor heat: Plastic or cardboard
    4. The way to wear (Stability): On the dog harness with sponge inside

Picture of draft box

* **Summary/Conclusions**
  + Summarize the major points
  + Answer your hypothesis
  + ???????
* **Literature Cited**
  + Include the journals you referenced in poster
* **Acknowledgements**
  + Include people that you would like to thank Include sponsors (funding source- ARP?)