XEED, LLC Capabilities Statement for BRIAR

The BRIAR program attempts to identify individuals using biometric signals from cameras at altitude and range. Although there are many challenges to this, the biggest we foresee is the accurate recreation of human body movement from the distortions in the cameras. Without accurate human body recreation, the whole body biometrics will be impossible to implement. If we are able to accurately measure the whole body then we can accurately determine the whole body biometrics. Working with bad data will give bad results and with camera data alone there is no way to verify whether the output of the algorithms matches real life therefore there needs to be a ground truth.

XEED, LLC is a small business that specializes in human motion capture with previous experience in government contracts. Our expertise lies in human body movement recreation and whole body analytics. Our most recent contract is the DARPA WASH program where XEED developed wearable devices to track the spread of infectious disease in warfighters (https://www.darpa.mil/program/warfighter-analytics-using-smartphones-for-health).
We developed a small, affordable 5 device system that is worn on the elbows, knees, and chest to accurately create human body movement to within 4cm of a stationary dual Kinect system. By teaming with us, accurate whole-body data can be acquired on a large number of subjects to speed up development on whole body biometrics research and to have a ground truth to verify whether the algorithms to get whole-body data from the distorted cameras is accurate.

We are looking for teams that have experience with human subjects research so that data can be collected on a large scale. If you are interested in teaming, please email me at alfredo@xeedlimits.com