Código para leitura do MPU6050 by Jeff Rowberg

QUATERNION

if you want to see the actual quaternion components in a [w, x, y, z] format (not best for parsing on a remote host such as Processing or something though). ***Exemplo dos dados extraídos para o sensor parado:***

quat	*0.52*	*0.24*	*-0.28*	*-0.77*
quat	*0.52*	*0.24*	*-0.27*	*-0.77*
quat	*0.52*	*0.24*	*-0.27*	*-0.77*

EULER

if you want to see Euler angles (in degrees) calculated from the quaternions coming from the FIFO.
Note that Euler angles suffer from gimbal lock (for more info, see http://en.wikipedia.org/wiki/Gimbal_lock). ***Exemplo dos dados extraídos para o sensor parado:***

euler	103.50	-27.95	-37.98
euler	103.50	-27.95	-37.98
euler	103.50	-27.95	-37.98

YAWPITCHROLL

If you want to see the yaw/pitch/roll angles (in degrees) calculated from the quaternions coming from the FIFO. Note this also requires gravity vector calculations. Also note that yaw/pitch/roll angles suffer from gimbal lock (for more info, see: http://en.wikipedia.org/wiki/Gimbal_lock). ***Exemplo dos dados extraídos para o sensor parado:***

ypr	-76.50	-31.96	-27.26
ypr	-76.41	-31.97	-27.25
ypr	-76.32	-31.97	-27.23

~~REALACCEL~~

if you want to see acceleration components with gravity removed. This acceleration reference frame is not compensated for orientation, so +X is always +X according to the sensor, just without the effects of gravity. If you want acceleration compensated for orientation, us OUTPUT_READABLE_WORLDACCEL *instead.* ***Exemplo dos dados extraídos para o sensor parado:***

areal	17	23	-11
areal	9	23	-9
areal	7	23	-2

~~WORLDACCEL~~

if you want to see acceleration components with gravity removed and adjusted for the world frame of reference (yaw is relative to initial orientation, since no magnetometer is present in this case). Could be quite handy in some cases. ***Exemplo dos dados extraídos para o sensor parado:***

aworld	342	-543	-47
aworld	341	-546	-47
aworld	335	-551	-48