**MatLab Program Flowchart**

Open serial objects

**Setup Sequence**

*Startup*

**incomplete**

*Wait for next data point to arrive*

*From Arduino*

Apply minimum and maximum Voltage limits

Send to FG by gpib

Get next voltage using characteristic equation and thresh holds

**Next FG Voltage**

Normalize

Read peak acceleration

**Receive Acceleration**

Initialize constants

Wakeup Arduino