ANOMALY TASKS

1. Tutorial. Help interested people learn about StreamPy quickly.
   1. Convert examples to small files or iPython Notebook.
   2. Some sort of online course?
   3. Detailed tutorial on integrating machine learning: Rahul’s apps.
   4. Details on plug-and-play: Ker Lee’s UI.
2. Demos: Make attractive demos, and make the code accessible to a person browsing the StreamPy site. Demos should showcase plug-and-play where appropriate though we can start with only code and use the GUI later.
   1. Audio: e.g., changes in pitch, reverberation for fixed .wav files. May have to use Fourier transforms.
   2. Twitter map of any hashtag, name
   3. Maps of meetup showing clustering; other examples of clustering
   4. Accelerometer. Given a set of accelerometer files, some for earthquakes, some for quiescent periods, change algorithms to detect picks.
   5. Business: e.g. insurance?
3. Parallel processing in the cloud.
   1. Demo parallel processing using TCP in Amazon EC2: Rahul’s code and Julian’s tutorial for EC2.
   2. Use any one of the standards for parallel processing: Storm, Spark or Samza
4. Port StreamPy to Swift
   1. Port functionality in increments. First simple element streams, then windows, then timed windows, etc.
   2. Add Kalyn’s iPhone sensors to the demo.
5. Port StreamPy to Java
   1. Port in increments as for Swift.
   2. Demos using Androids.