## **DroneSystem** c:struct detectors: vector Detector localiz: scalar Localizer F Axis: vector double DroneSystem(): DroneSystem start(): void test(DroneSystem, vector double): scalar double x 3 localizerTest(vector double): void figureSetup(vector string): scalar int x 5 classStringToNum(scalar string): scalar int **Detector** c:struct bufferedAudio: vector double For the detector F AXIS: vector double localizer(): localizer block: Bold direction(double,double,double): [int, vector double] FRAMES HELD: scalar int properties and previousSpectrum: vector double display2(vector int, vector double, matrix double, functions are were currentEnergy: scalar double matrix double, matrix double, matrix double, matrix double, what was used in the currentFlux: scalar double matrix double, matrix double, matrix double, matrix double final working system. . matrix double. matrix double) : void currentf0: scalar double Everything else is currentZCR: scalar double averager(vector int): int experimental. currentHarmonicPeak: scalar double meanangle(vector int, vector int, vector int): int currentDroneAmplitude: scalar double autoCorrelator: Autocorrelator drone mdl: classificationKNN **Detector(struct, struct): Detector** step(vector double): String spectro(): vector double spectralFlux(vector double): scalar double spectralEnergy(vector double): scalar double makeDecision decisionTree(scalar double, scalar double, scalar double, vector double): scalar string makeDecision\_kNN(scalar double x 4, vector double) : scalar string getEnergy(): scalar double getFlux(): scalar double getf0(): scalar double getZCR(): scalar double getPreviousSpectrum(): vector double periodicity(): scalar double, scalar boolean signalStrengthEstimate(scalar double, scalar int, vector double): scalar double Auxiliary functions: hardprocesspeaksv2(vector double): scalar boolean, scalar double

peakfinder(vector double, scalar double, scalar double, scalar int, scalar boolean, scalar boolean): vector int, vector double

Localizer