Aug 17 – 2pm – Final Exam

* Simmilar in delivery to 485 exam
* Zoom session during exam period
* Questions focus on understanding of material
* Written form answers
* Interesting to ask in matlab involves too much work

Office hours will stay in place until the exam

Today – finishing off A8

* Alex noticed be careful of test
* Passing test tells u hyp is true
* Failing does not grantee hyp is false

Match filtering

* Similar to cross correlation
* Powerful way to search time series for events
* Event in data \*\* (…covid spike?)

Median filters

* Relative to time domain signals
* Get rid of sigle datapoint spikes
* Window of the data
* Shift through data
* Calculate stdev in window
  + Is next value more than 2/3 stdev away (at tails of distribution)
  + Replace spike with median computed over the window

Wavelet de-noising can leave spikes in the data

Correct for stochastic sampling

* suppose constant sampling rate
* if not T belongs to some distribution – stochastic..
* on/off periods
  + ppl arriving in que
  + on – how much work to do
  + off – time btwn period of work and the next one
  + if both are exponential – poisson distribution
  + interpolation to deal w it (depending on nature of the data)

Applications where frequency is not that important

* freq not independent of shape of signal

Paper by Robert grey – quantization noise

Stochastic impact stat and ergodicity?

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