CC Research - Process (log)

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Backlog

In-progress

Done

1. We wanted to develop a model for to build an emulator. Utilizing Gaussian processes, we simulated data from GP in the following manner:

   (a) Simulate $\underset{\sim}{x_i} \sim GP(0, \Sigma)$ for $i = 1, ..., n$, n is the sample size and $\underset{\sim}{x_i}$ is a vector of length $T + 1$, i.e $\underset{\sim}{x_i} = (x_0, x_1, ..., x_T)$,

   where Σ is AR(1) with unit variance $(\sigma = 1)$ s.t $\Sigma = \begin{bmatrix} 1 & \rho & \rho^2 & & \\ \rho & 1 & \rho & . & . \\ \rho^2 & \rho & 1 & & \\ & . & & . & \\ & . & & & . \end{bmatrix}$

   ρ is fixed ro be 0.95.

   Note: We assume that Time(T) << sample size(n)