An Approximation Toolkit for High End Computing System Design

1. Motivation --- describe VarSys project and need for predicting/controlling variance, and for predicting CDFs of system performance (security application).

2. Usability and impact --- describe the Web interface for variance prediction and automating data generation.

3. Toolkit description.
        3.1. Delaunay interpolation.
        3.2. Box splines and IBM.
        3.3. Voronoi interpolation.

4. Examples --- I/O performance modeling and prediction, other examples?

Possible journals: IEEE Computer magazine, IEEE/ACM Computational Science and Engineering magazine, Internat. J. of Computer Research, Simulation