Examples:

* [Simple Population Model](http://shodor.org/talks/ncsi/excel/SimplePopulation.xls) (SimplePopulation.xls), [Background Information](http://shodor.org/talks/ncsi/excel/SimplePopulation.html)
* [System Dynamics Model](http://shodor.org/talks/ncsi/excel/SystemDynamics.xls) (SystemDynamics.xls), [Background Information](http://shodor.org/talks/ncsi/excel/SimplePopulation.html)
* [Function Model](http://shodor.org/talks/ncsi/excel/Snake2.xls) (Snake2.xls), [Background Information](http://shodor.org/talks/ncsi/excel/Snake2.html)
* [Time-to-Science](http://shodor.org/talks/ncsi/excel/TTS.xls) (TTS.xls), [Background Information](http://shodor.org/talks/ncsi/excel/TTS.html)
* [Pharmacology Dosing](http://shodor.org/talks/ncsi/excel/Pharma.xls) (Pharma.xls), [Background Information](http://shodor.org/talks/ncsi/excel/Pharma.html)
* [SIR with Scroll Bars](http://shodor.org/talks/ncsi/excel/SIR_sliders.xls) (SIR\_sliders.xls), [Background Information](http://shodor.org/talks/ncsi/excel/SIR_sliders.html)
* [DNA Sequence Analysis](http://shodor.org/talks/ncsi/excel/Analysis.xls) (Analysis.xls), [Background Information](http://shodor.org/talks/ncsi/excel/Analysis.html)
* [Dominant Recessive Sampling](http://shodor.org/talks/ncsi/excel/GeneticsExploration.xls) (GeneticExploration.xls), [Background Information](http://shodor.org/talks/ncsi/excel/GeneticsExploration.html)
* [Cystic Fibrosis](http://shodor.org/talks/ncsi/excel/CFtest.xls) (CFtest.xls), [Background Information](http://shodor.org/talks/ncsi/excel/CFtest.html)
* [Game of Life](http://shodor.org/talks/ncsi/excel/GameOfLife2a.xls) (GameOfLife2a.xls), [Background Information](http://shodor.org/talks/ncsi/excel/GameOfLife2.html)
* [Laplace Equation](http://shodor.org/talks/ncsi/excel/Pulse.xls) (Pulse.xls), [Background Information](http://shodor.org/talks/ncsi/excel/Pulse.html)
* [Fields and Sheets](http://shodor.org/talks/ncsi/excel/dipole.xls) (dipole.xls), [Background Information](http://shodor.org/talks/ncsi/excel/dipole.html)
* [Pseudo Random Numbers](http://shodor.org/talks/ncsi/excel/rng.xls) (rng.xls), [Background Information](http://shodor.org/talks/ncsi/excel/rng.html)
* [Problematic Patterns in Random Noise](http://shodor.org/talks/ncsi/excel/data.xls) (data.xls), [Background Information](http://shodor.org/talks/ncsi/excel/data.html)
* [Two Algorithms for Monte Carlo Integrals](http://shodor.org/talks/ncsi/excel/MonteCarloPi.xls) (MonteCarloPi.xls), [Background Information](http://shodor.org/talks/ncsi/excel/MonteCarloPi.html)
* [Reaction Data](http://shodor.org/talks/ncsi/excel/reaction_data.xls) (reaction\_data.xls), [Background Information](http://shodor.org/talks/ncsi/excel/reaction_data.html)
* [Salt Diffusion](http://shodor.org/talks/ncsi/excel/SaltDiffusion.xls) (SaltDiffusion.xls), [Background Information](http://shodor.org/talks/ncsi/excel/SaltDiffusion.html)
* [Properties](http://shodor.org/talks/ncsi/excel/Properties.xls) (Properties.xls)
* functions and equations for specific plots
* [www.shodor.org/interactivate/activities/Fire/](http://www.shodor.org/interactivate/activities/Fire/)

Representation

* + Fire spread to nearest neighbor (1st order)
  + As problem of burning increases, % of trees that burn increases
  + Lesson: Average of burning trees at 0.50 custom probability is a reliable measure than individual datapoints
  + Average should be done at least 100 datapoints to be more reliable or to validate it