

# Probabilistic Programming

## Codes:

- SMUQ (UIUC), Fortran 2008

[https://www.politesi.polimi.it/bitstream/10589/118101/3/SimoneVenturi\\_MastersThesis.pdf](https://www.politesi.polimi.it/bitstream/10589/118101/3/SimoneVenturi_MastersThesis.pdf)

- Dakota (Sandia National Lab.s), C++

<https://dakota.sandia.gov/release-notes-headings/uncertainty-quantification-ug>

## Python Libraries:

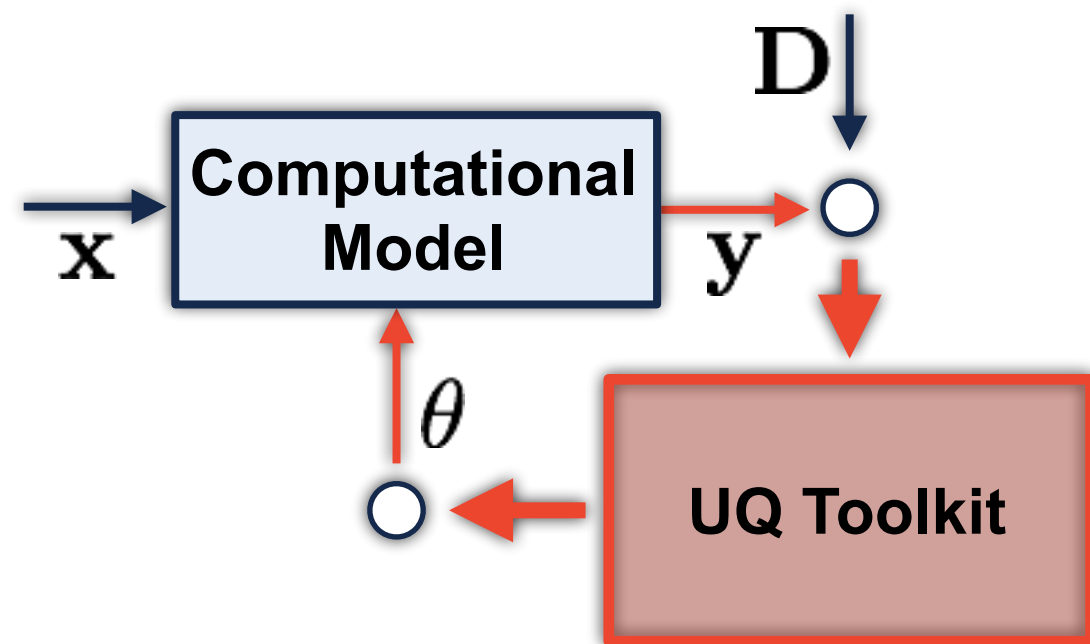
- PyMC3

<https://docs.pymc.io/>

- TensorFlow Probability

<https://www.tensorflow.org/probability>

Fusion Plasma Example: [https://youtu.be/Bb1\\_zlrjo1c](https://youtu.be/Bb1_zlrjo1c)



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# **Example 1:**

# **Mass-Spring-Damper System**

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