RQA Toolbox for MATLAB

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Toolbox Code Files

- **ami.m** calculates average mutual information for phase space reconstruction.
- **fnn.m** calculate global false nearest neighbors analysis for phase space reconstruction.

- **aRQA** performs auto-recurrence quantification analysis on continuous data.
- **aRQA_Batch** performs auto-recurrence quantification analysis on a batch of selected continuous data files

- **xRQA** performs cross-recurrence quantification analysis on continuous data.
- **xRQA_Batch** performs cross-recurrence quantification analysis on a batch of selected continuous data files.

- **aRQACat** performs auto recurrence quantification analysis on categorical data.
- **aRQACat_Batch** performs auto recurrence quantification analysis on a batch of selected categorical data files.
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- **xRQACat** performs cross-recurrence quantification analysis on categorical data.
- **xRQACat_Batch** performs cross-recurrence quantification analysis on a batch of selected categorical data files.

See header of each file for example syntax and input parameter settings.

Toolbox Data Files

- **WhitNoiseData.txt** two columns of white noise (random) data (continuous data)
- **PostureData.txt** two columns of postural sway time-series data (continuous data)
- **RockingChairData.txt** two columns of rhythmic rocking chair data (continuous data)
- **Elvis.txt** Elvis song lyrics in categorical (number) form.

Example Syntax (copy a line into the command window in MATLAB)

```
>> aRQA('Posture.txt', 1, 6, 10, 1, 15, 1, 1);

>> xRQA('RockingChairData.txt', 1, 3, 15, 1, 10, 1, 1);

>> aRQACat('Elvis.txt', 1, 1)

>> xRQACat('Elvis.txt', 1, 1)
```