

# Demos

[Jump to bottom](#)

Joseph Lizier edited this page a minute ago · 2 revisions

*List of demonstration code sets distributed with the toolkit*

## Demos

Several sets of demonstration code are distributed with the toolkit. Links to their wiki pages and their location in the distribution are given below:

- [AutoAnalyser](#) -- `demos/AutoAnalyser` -- a GUI tool to compute transfer entropy on a chosen data set with the toolkit, and also automatically generate code in Java, Python and Matlab to show how to do this calculation with the toolkit.
- [SimpleJavaExamples](#) -- `demos/java` -- a set of basic examples using the Java toolkit;
- Several demo sets mirror the `SimpleJavaExamples` to demonstrate the use of the toolkit in non-Java environments:
  - [OctaveMatlabExamples](#) -- `demos/octave` -- basic examples on using the Java toolkit from Octave or Matlab environments;
  - [PythonExamples](#) -- `demos/python` -- basic examples on using the Java toolkit from Python using the JPyPe interface;
  - [R\\_Examples](#) -- `demos/r` -- basic examples on using the Java toolkit from R using the rJava interface;
  - [JuliaExamples](#) -- `demos/julia` -- basic examples on using the Java toolkit from Julia;
  - [Clojure\\_Examples](#) -- `demos/clojure/examples` -- basic examples on using the Java toolkit from Clojure;
- [GPU](#) -- `demos/gpu` -- describes how to use the GPU implementation of the KSG estimators.
- [SchreiberTeDemos](#) -- `demos/octave/SchreiberTransferEntropyExamples` -- using the toolkit to reproduce the transfer entropy examples originally included in Schreiber's 2000 paper introducing transfer entropy;
- [CellularAutomataDemos](#) -- `demos/octave/CellularAutomata` -- using the Java toolkit to plot local information dynamics profiles in cellular automata; the demo is run under Octave or Matlab;
- [DetectingInteractionLags](#) -- `demos/octave/DetectingInteractionLags` -- demonstration of using the transfer entropy with source-destination lags; the demo is run under Octave or Matlab;
- [InterregionalTransfer](#) -- `demos/java/interregionalTransfer` -- higher level example using collective transfer entropy to infer effective connections between "regions" of data;
- [NullDistributions](#) -- `demos/octave/NullDistributions` -- investigating the correspondence between analytic and resampled distributions for TE and MI under null hypotheses of no relationship; the demo is run under Octave or Matlab;

You can also review the [JUnitTestCases](#) -- the test cases for the Java toolkit included in the distribution -- these case also be browsed to see simple use cases for the toolkit.

## Extras

You may also be interested in several [extra](#) features that the toolkit has (in addition to the information dynamics calculators); e.g. Octave text file format reading and writing, matrix manipulation, mathematical functions, etc.

JIDT -- Java Information Dynamics Toolkit -- [Joseph Lizier](#) *et al.*

► Pages 36

• [Home](#)

- Getting started
  - [Downloads](#)
  - [Installation](#)
  - [Documentation](#)
  - [Tutorial](#)
  - [Demos](#)
- [Implemented Measures](#)
- [Demos](#)
  - [Auto analyser demo](#)
  - [Simple Java demos](#)
  - Non-Java environments
    - [Matlab/Octave demos](#)
    - [Python demos](#)
    - [R demos](#)
    - [Julia demos](#)
    - [Clojure demos](#)
  - [GPU](#)
  - [Cellular Automata](#)
  - [Schreiber Transfer entropy demos](#)
  - [Detecting interaction lags](#)
  - [Null distributions](#)
  - [Interregional transfer](#)
- [Course](#) (long)
- [Tutorial](#) (short)
- Non-Java environments
  - [Matlab/Octave](#)
    - [Array conversion to/from Octave](#)
  - [Python](#)
  - [R](#)
  - [Julia](#)
  - [Clojure](#)
- [FAQs](#)
- Miscellaneous
  - [Related toolkits](#)
  - [Road map for new features](#)
  - [Extra features](#)
- For serious developers!
  - [Unit tests](#)
  - [Ant scripts](#)
  - [Making a new release](#)
- [Publications resulting](#)

### Clone this wiki locally

`https://github.com/jlizier/jidt.wiki.git`

