

Resource Summary Report

Generated by SPARC SAWG on Jul 29, 2026

Knowledge Engineering from Experimental Design

RRID:SCR_001238

Type: Tool

Proper Citation

Knowledge Engineering from Experimental Design (RRID:SCR_001238)

Resource Information

URL: <https://github.com/SciKnowEngine/kefed.io>

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Description: Knowledge engineering software for reasoning with scientific observations and interpretations. The software has three parts: (a) the KEfED model editor - a design editor for creating KEfED models by drawing a flow diagram of an experimental protocol; (b) the KEfED data interface - a spreadsheet-like tool that permits users to enter experimental data pertaining to a specific model; (c) a "neural connection matrix" interface that presents neural connectivity as a table of ordinal connection strengths representing the interpretations of tract-tracing data. This tool also allows the user to view experimental evidence pertaining to a specific connection. The KEfED model is designed to provide a lightweight representation for scientific knowledge that is (a) generalizable, (b) a suitable target for text-mining approaches, (c) relatively semantically simple, and (d) is based on the way that scientist plan experiments and should therefore be intuitively understandable to non-computational bench scientists. The basic idea of the KEfED model is that scientific observations tend to have a common design: there is a significant difference between measurements of some dependent variable under conditions specified by two (or more) values of some independent variable.

Abbreviations: KEfED

Resource Type: software application, software resource

Defining Citation: [PMID:21859449](https://pubmed.ncbi.nlm.nih.gov/21859449/)

Keywords: experimental design, observation, interpretation, reasoning, experimental data, observational assertion, knowledge engineering, java

Funding: NIGMS R01-GM083871;
NIMH 1R01MH079068-01A2;
NCRR 1 U24 RR025736-01

Availability: Free, Available for download, Freely available

Resource Name: Knowledge Engineering from Experimental Design

Resource ID: SCR_001238

Alternate IDs: nif-0000-07745

Alternate URLs:

<https://wiki.birncommunity.org/display/NEWBIRNCC/Knowledge+Engineering+from+Experimental+D>

License: MIT License

Record Creation Time: 20220129T080206+0000

Record Last Update: 20260727T040300+0000

Ratings and Alerts

No rating or validation information has been found for Knowledge Engineering from Experimental Design.

No alerts have been found for Knowledge Engineering from Experimental Design.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 1 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Moreau T, et al. (2015) Ontology-based approach for in vivo human connectomics: the medial Brodmann area 6 case study. Frontiers in neuroinformatics, 9, 9.