

In line with the strategic priorities of Digital Europe ICEP-2022 conference organizers offer a workshop to promote computational social sciences and humanities

Engaging with literature review and structural equation modelling with Python and R

4 acad. hours

10 AM – 1:15 PM, 7th of April

- Level: easy, but all levels of expertise are welcome.
- Audience: researchers and doctoral students interested in literature reviews and / or structural equation modelling.
- Type of workshop: sharing practical “know how” and trying out various Python, R and GUI (graphical user interface) tools that help in the process of a literature review and in the second part getting acquainted with a completely different topic – a quantitative analysis methodology of structural equation modelling and its typical uses.
- Venue: Zoom link <https://liedm.zoom.us/j/84154265591>
- Certificates: registered participants for this workshop will get a certificate of the workshop attendance (4 acad. hours).
- Before workshop: register via the [link](#) and select ‘workshop’; have your own laptops; install [Anaconda](#) to use Python notebooks; also, install [R](#) and then [free RStudio Desktop](#).
- Contact person: Rimantas Rauleckas, email: rimantas.rauleckas@ktu.lt

Programme

Topic/subtopic	Tools
1. Topic: literature review (2 acad. hours)	
Keyword search in Scopus and Opencitation	Python packages <i>elsapy</i> , <i>opencitingpy</i>
Search string generation	R library <i>litsearchr</i>
Citation chasing and bibliographic network analysis via GUI	GUI: https://estech.shinyapps.io/citationchaser/ https://www.connectedpapers.com/ https://www.lens.org/lens/search/scholar/structured Python: <i>networkx</i>
Abstract screening with active learning AI algorithm	GUI: <i>abstraktr</i> Python: <i>asreview</i>
Text analysis: topic modelling	Python: <i>sklearn</i> , <i>gensim</i>
2. Topic: structural equation modelling (SEM) (2 acad. hours)	
Confirmatory factor analysis and structural equation modelling with covariance-based SEM	CB-SEM: R: <i>lavaan</i> Python: <i>semopy</i>
Structural equation modelling with partial least squares SEM	PLS SEM: R: <i>plspm</i>