

R, mappeR, and shiny

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- R is a popular programming language for data wrangling and visualization
- Many **packages** — collections of functions — available through central CRAN repository
- Link: <https://www.r-project.org/>

mappeR

- **mappeR** is an R package available on CRAN which implements the Mapper algorithm.
- It is meant to succeed Paul Pearson's **TDAMapper** package, which is no longer being updated and was removed from CRAN in 2022.
- Canonical link (documentation lives here as well):
<https://cran.r-project.org/package=mappeR>
- Link to Pearson's TDAMapper:
<https://github.com/paultpearson/TDAmapper/>

Shiny

- **Shiny** is a web framework for developing applications in R (and recently, Python).
- Official website: <https://shiny.posit.co/r/>

- Shiny + mappeR = shinymappeR, an application which lets you interactively mess with Mapper parameters
- Github link: <https://github.com/gergill/shinymappeR>
- RStudio: <https://posit.co/downloads/>
- Running with RStudio: download all files from repo into a folder. Open the folder as a new project in RStudio.