

To members of the Editorial Board of the R Journal:

Thank you for considering our submission *Ari: The Automated R Instructor*. In accordance with the instructions for submission of papers describing add-on packages, we include this rationale of why our package **ari** presents a novel use of R, and how **ari** invites re-use of the package. We also believe that this work inspires thought about how artifacts that are commonly produced using the R language like computational narratives and data visualizations can be remixed and reused to reach new audiences in new forms of media.

It is undeniable that computational notebooks are having an unprecedented effect on how science is being recorded, how data is being analyzed, and how scientists are communicating their results and insights. For the R community, our computational notebook is the R Markdown document. R Markdown started as literate programming framework, allowing users to intertwine prose, code, tables, and graphics. In the years since its introduction it has been adapted as a raw, plain-text format which can be used to create webpages, academic papers, slide presentations, and interactive dashboards.

We present **ari** as the next evolution in reproducible scientific communication based on plain text formats like R Markdown. The **ari** package transforms R Markdown documents, PowerPoint presentations, PDFs, and several other file types into narrated videos that are optimized to be shared on social platforms like YouTube or on educational sites like Coursera. We designed **ari** to fit into communication workflows that scientists and R users commonly use, which leads us to believe that **ari** has significant potential for re-use and integration into new R and R Markdown based workflows. Moreover, in the **ariExtra** package, an extension of **ari**, discussed within, has an **ari_document** output type, which can be rendered in RStudio and with the **rmarkdown** package, thus fitting in the R Markdown framework. Video production in R is a nascent field, however the growth of the popularity of video on the internet, especially as a teaching tool, indicates that there is a large potential audience for video and audio tools in the R programming community. Based on this potential, we believe that **ari**, and the enclosed demonstration and explanation merits consideration as a noteworthy project in the interest of the R community.

Thank you and sincerely,

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