Breaking Barriers with TALL: A Text Analysis Shiny app for All

Massimo Aria^{1,4}, Corrado Cuccurullo^{1,2,4}, Luca D'Aniello^{1,4}, Michelangelo Misuraca^{3,4}, Maria Spano^{1,4}

¹University of Naples Federico II – <u>massimo.aria@unina.it;</u> <u>luca.daniello@unina.it;</u> <u>maria.spano@unina.it</u>

²University of Campania Luigi Vanvitelli – <u>corrado.cuccurullo@unicampania.it</u>

³University of Calabria – <u>michelangelo.misuraca@unical.it</u>

⁴K-Synth spin-off, University of Naples Federico II

Abstract

The rapid technological advancements in recent years allowed to process different kinds of data to study several real-world phenomena. Within this context, textual data has emerged as a crucial resource in numerous research domains, opening avenues for new research questions and insights. However, many researchers lack the necessary programming skills to effectively analyze textual data, creating a demand for user-friendly text analysis tools. While languages such as R and Python provide powerful capabilities, researchers often face constraints in terms of time and resources required to become proficient in these languages.

This paper introduces TALL - Text Analysis for All, an R Shiny app that includes a wide set of methodologies specifically tailored for various text analysis tasks. It aims to address the needs of researchers without extensive programming skills, providing a versatile and general-purpose tool for analyzing textual data. With TALL, researchers can leverage a wide range of text analysis techniques without the burden of extensive programming knowledge, enabling them to extract valuable insights from textual data in a more efficient and accessible manner.

Keywords: Natural Language Processing (NLP), Text Analysis Tools, R Shiny App, User-friendly Interface