Rozha: Supporting and Simplifying Multilingual Natural Language Processing

What is Rozha?

- A Python package that simplifies many NLP pipelines
- Includes functions to perform a wide variety of NLP processes using over 70 languages, from stopword removal to sentiment analysis and many more, in addition to visualizations of the analyzed texts
- Allows users to choose from NLTK, spaCy, and Stanza for many of the processes it can perform, allowing for easy comparison of the output from each library
- Released on <u>GitHub</u> and <u>PyPI</u> under the GNU General Public License, allowing users to use and contribute to the tool with minimal limitations.

Why create Rozha?

- To serve researchers and other users by streamlining NLP processes
- To make NLP more accessible to students and beginners interested in exploring the field
- To promote NLP in languages other than English by making it easy for users of varying experience levels to work with languages other than English

What can it do?

- The package contains three modules for processing, analyzing, and visualizing text
- In addition to NLP processes, the visualize module allows users to generate graphs of their processed NLP data
 - A full breakdown of the functions can be viewed here: https://github.com/ian-nai/Rozha/blob/main/Functions.md
- Sample code demonstrating the package can be run in the following Jupyter notebook:
 - https://colab.research.google.com/drive/108FvBVuNIIMneNzdNL YSVbu91D2dKcGs?usp=sharing

Questions?

Please let me know in the conference Slack, or by writing to me at ian.goodale@austin.utexas.edu

I am also active on GitHub at https://github.com/ian-nai/