Reproducibility review of: What are intersections for pedestrian users?"

Eleni Tomai

2022-06-16

This report is part of the reproducibility review at the AGILE conference. For more information see https://reproducible-agile.github.io/. This document is published on OSF at https://osf.io/r5w79/. To cite the report use

> *Tomai, E. (2022, June 22). Reproducibility review of: What are intersections for pedestrian users? https://doi.org/10.17605/OSF.IO/XPG6Y*

Reviewed paper

> *Favreau, J.-M., and Kalsron, J.: What are intersections for pedestrian users?, AGILE GIScience Ser., 3, 4, https://doi.org/10.5194/agile-giss-3-4-2022*

Summary

The updated submission contains a DASA section and links to two repositories on GitHub, which have been updated by the author during the reproducibility review process. The first repository contains all necessary files and code for implementing the segmentation process, while the second, comprises all files necessary for using the evaluation tool. The reproduction was successful.

Reproducibility reviewer notes

After checking the DASA section in the paper I opened the repositories https://github.com/jmtrivial/crossroads-segmentation/releases/tag/agile-2022 and https://github.com/jmtrivial/crossroads-evaluation/releases/tag/agile-2022 on GitHub. The README provided good instructions, so I began the process. Shortly after the reproducibility process started, a bug with French characters (those with accents) was identified. Specifically, when running the get-crossroad-description.py script, in the “by-name” argument, when trying to generate the example using "obélisque" the French character containing the accent could not be recognized. Upon conducting the authors regarding this issue, they provided a change in the code to test on a Windows platform and when this proved to work, they uploaded an updated version that could work on pip.

All other parameters’ combinations tested when running the "get-crossroad-desprciption.py” have been successful. JSON and png files have been generated when using the --to-json-all/--to-json or --display-segmentation/-display-main-crossroad accordingly (See attached figures 1 to 3).

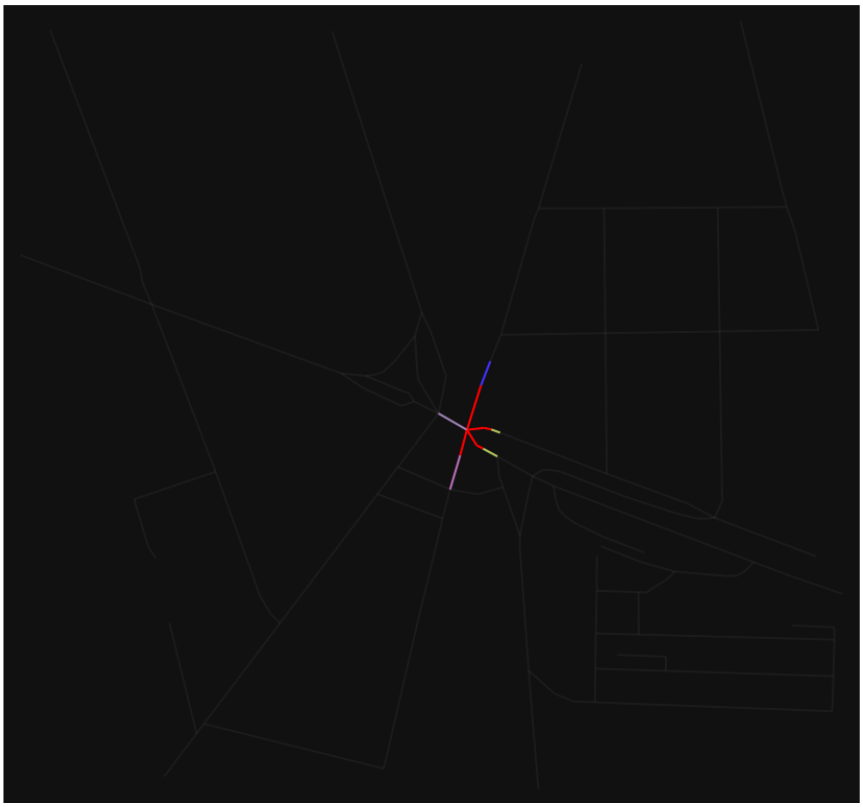


Fig. 1 The result of the combination: “get-crossroad-description.py --by-name Nicolas --display-main-crossroad”

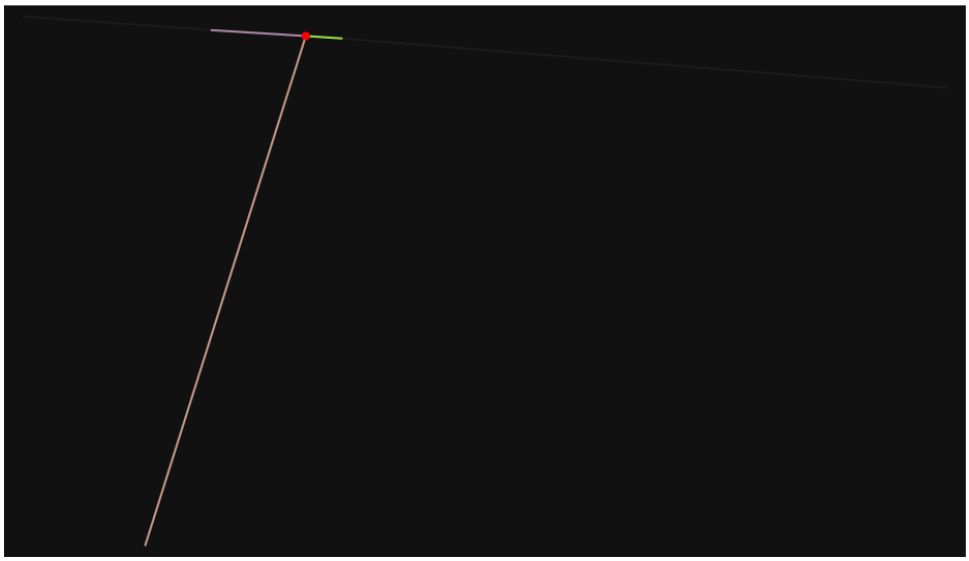
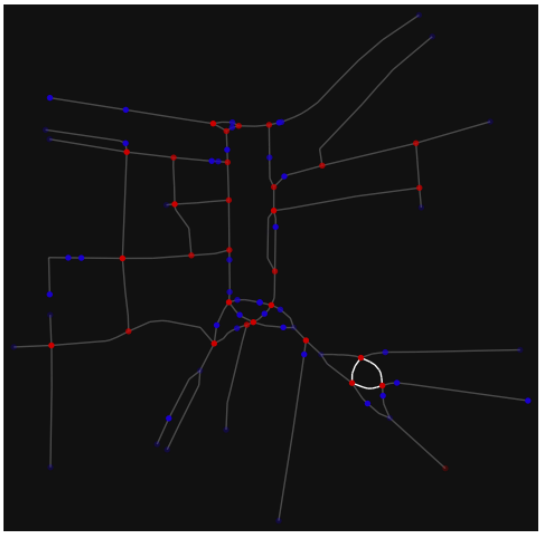


Fig.2 The result of the combination: “get-crossroad-description.py --by-coordinates 48.15 2.35 --display-main-crossroad”



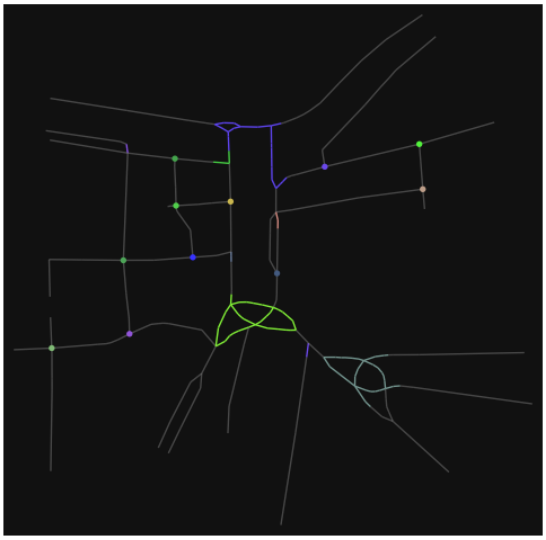


Fig. 3a and 3b the results of the following: “get-crossroad-description.py --by-name Delille --display-reliability --display-segmentation” and “get-crossroad-description.py --by-name Delille --display-reliability --display-main-crossroad --to-json-all Delille_rel_all” respectively.

In the updated version, warning messages were returned on two occasions:

1) when running the get-crossroad-description.py script and

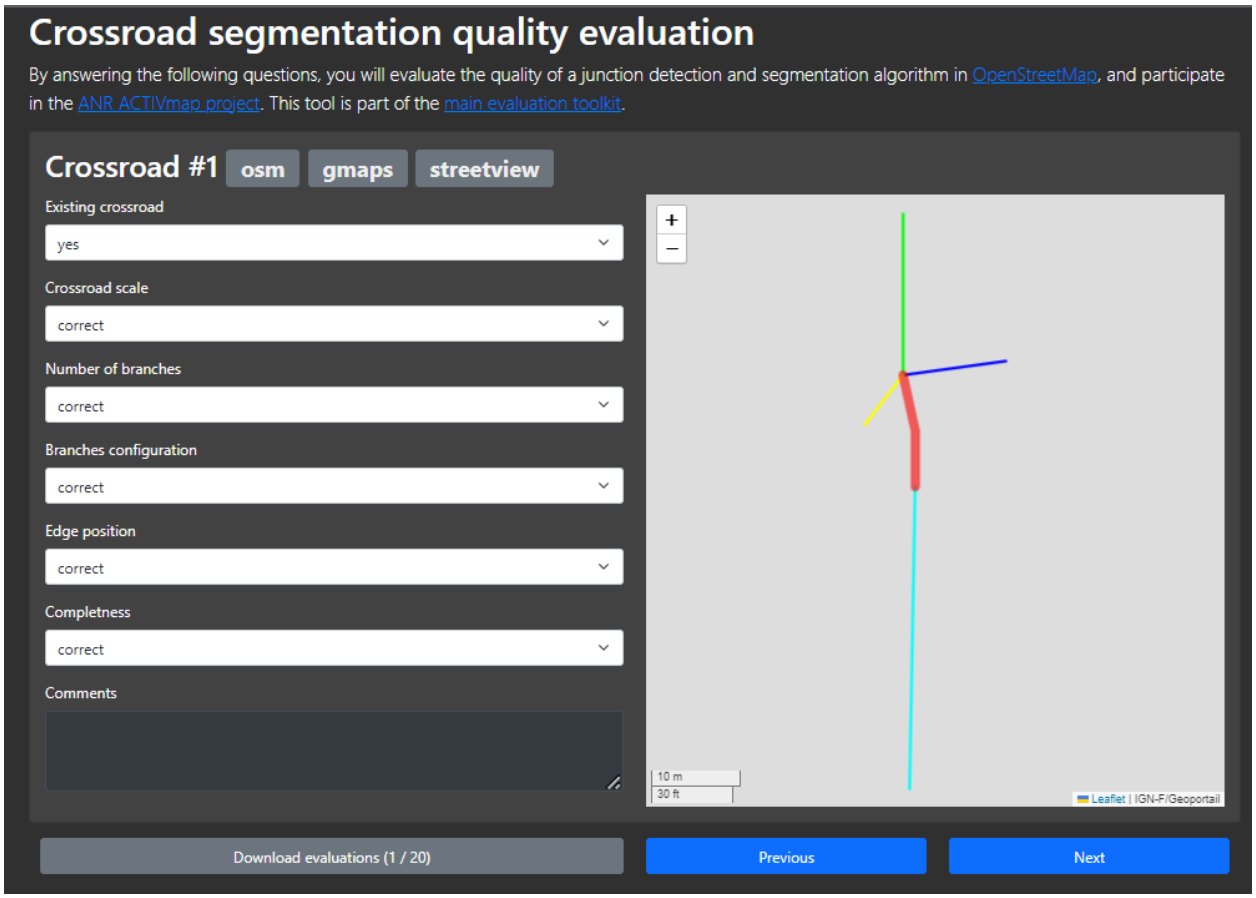
2) when running the get-paris-streets.py script

Contacting the authors on these, and after letting them know that osmnx v1.1.2 is installed, they said that the suitable/recommended version is osmnx v1.0.2 and that they will include this clarification in the updated readme file.

Finally, the evaluation tool worked without any issues. It was tested using an Apache server on a laptop.

The images included below (Fig.4a and b) constitute screenshots of the evaluation tool upon evaluating the json file produced by running the script with the following command:

```
get-crossroad-description.py --by-name Delille --display-reliability
--display-main-crossroad --to-json-all Delille_rel_all
```



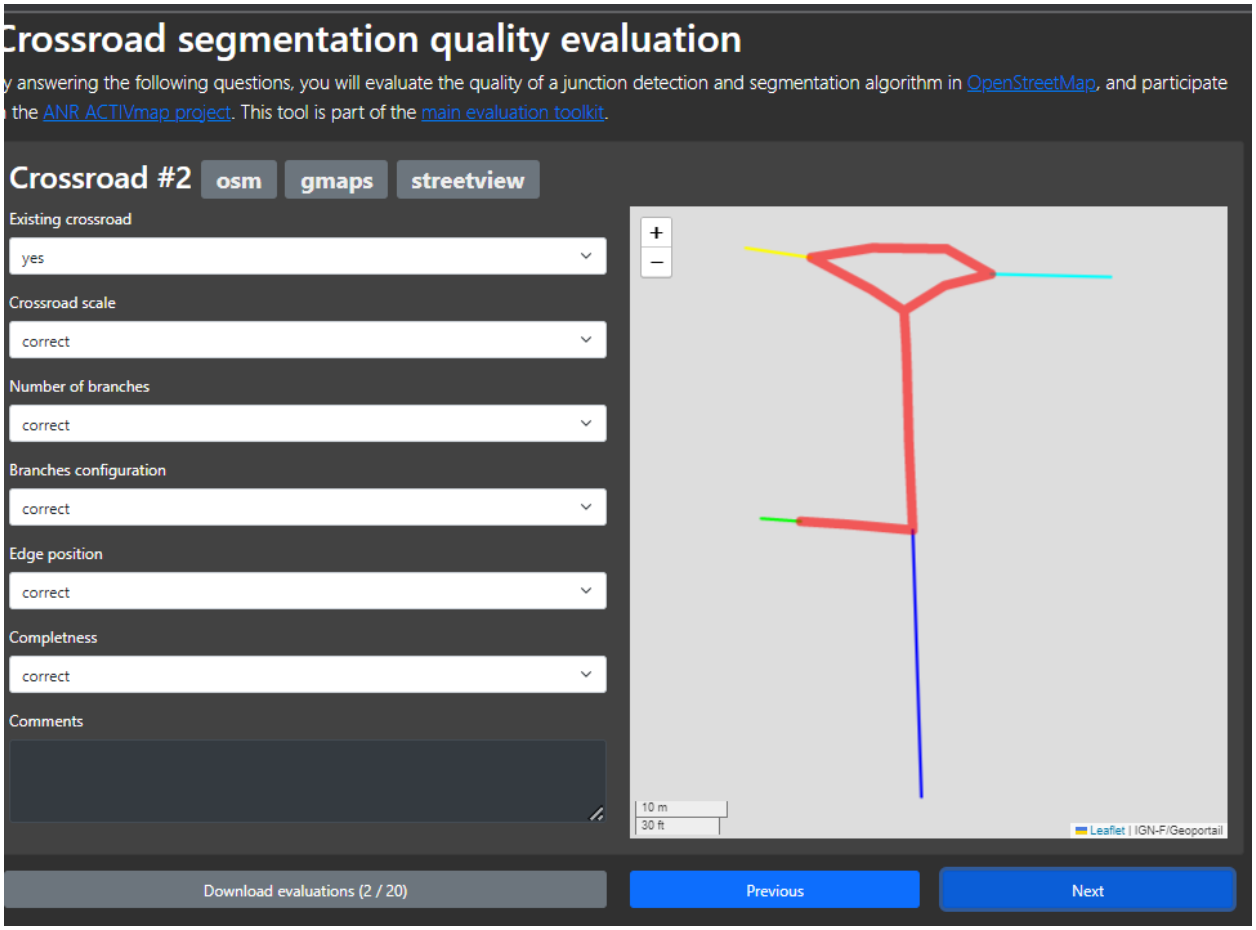


Fig. 4a and 4b Screenshots of the evaluation tool upon evaluating a json file derived from the segmentation process.