Panel Review of 3c

October 7, 2019

Five Review Elements:

The following elements should be considered in the review for both criteria:

- 1. What is the potential for the proposed activity to:
 - (a) advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
 - (b) benefit society or advance desired societal outcomes (Broader Impacts)?
- 2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- 3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- 4. How well qualified is the individual, team, or institution to conduct the proposed activities?
- 5. Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?

Purpose of Proposal:

The author proposes to improve upon sequence alignment piplines that reduce runtime. A heuristic version of the in-situ Forward-Backward algorithm will be used in the process of extracting class probabilities.

Intellectual Merit

The work would improve upon the run-time bounds of an existing model.

Broader Impacts

This work would allow researches to conduct their work in a more timely fashion.

Recap of main points

See the points made under the previous sections.