

To: Selected College of Education Faculty and Research Staff

The College of Education is seeking proposals for education research projects that aim to incorporate machine learning (ML) approaches in the analysis and interpretation of project data. The award will provide computational expertise and resources through the Iowa Initiative for Artificial Intelligence (IIAI, www.iiai.uiowa.edu) to directly support one selected research project. Selected project may be new projects or computational expansions of existing funded research projects.

Responsive proposals will:

- address important questions in education research using data-driven approaches
- be based on access to and/or acquisition of sufficient data to answer (or start answering) such questions
- seek machine learning expertise as an enabling strategy
- be willing to invest effort in building a new interdisciplinary team

Research projects that are not currently supported by external peer-reviewed funding should include realistic plans for preparing and submitting a large (NSF or similar sized) extramurally-funded education research proposal within 12 months after receiving pilot funding.

Awards will amount to the equivalent of \$15,000 in support from the IIAI. This corresponds to about 8 weeks of expert support at 25% effort and the requisite computational resources to achieve results adequate as preliminary data in a grant proposal. It will also include an expert write-up of the needed methodology for a large extramural proposal. The IIAI will consult with awardees to plan for longer-term collaborations that will ensure the sustainability of the project. It is anticipated that one award will be made during this round.

Applicants are required to review concepts with M. Sonka (milan-sonka@uiowa.edu), Director of IIAI, who will make the recommendation for a full submission. An internal peer-review committee will be identified to review proposals and make recommendations concerning funding to the College of Education leadership.

The proposal submission has 3 phases – see the timeline below ... emailing a statement of intent, discussing your plans with IIAI, and submitting a brief proposal (maximum 2 pages) addressing the following:

1. Project Title
2. Investigators
3. Specific aims + Statement of Education relevance
4. Current support for the project (if any)
5. Preliminary data (if any), description of available data to facilitate the proposed research
6. Description of needs to obtain/use IIAI services (expertise, computational resources)
7. Specifics on how involvement of the IIAI expertise will advance the research
8. Plans to receive extramural funding

Timeline:

- 4/7/2023
 - Email a brief statement of intent to M. Sonka (milan-sonka@uiowa.edu)
 - This email should include a draft document briefly outlining items 1, 3, 5 of the proposal above
- 4/10/2023 – 4/28/2023
 - Scheduled meetings of each team with IIAI to discuss the proposed research
- 5/12/2023
 - Proposal submission (2 pages max.)
- 5/15 – 5/26/2023
 - Internal review of proposals, recommendation to CoEd leadership
- 5/29 – 5/31/2023
 - Selection of projects to be funded
- 6/1/2023
 - Announcement of one (1) faculty project to be funded