

Template for New Challenges Submission (maximum two pages)

This template is designed for researchers who have learning process data and are curious about whether Heterogeneous Information Network Analysis (HINA) could offer new insights or solutions. You do not need to know HINA. The goal is to describe your data and research problem clearly, so that together with fellow participants at the workshop we can explore the potential of HINA for your specific challenge.

Submission Title:

1. Research Background

a. Research Focus & Significance: What is the focus of your project? And what is its significance?

b. Current Methods & Gaps: What methods have you or others used to study the topic, and what are their strengths and limitations?

2. Description of Your Dataset

a. Data Context & Unit of Analysis: How was the dataset collected and in what learning context (e.g., online forum, face-to-face group discussion)? What is the primary unit of analysis (e.g., the student, the group, the discussion post), and what are its key attributes?

b. Entities & Relationships of Interest: What are the different entities in your data (e.g., students, groups, coded constructs, subtasks)? What relationships are you interested in analyzing (e.g., student-subtask interactions, student-construct associations, oral -spatial connections)?

3. Proposed Research Questions

- Formulate your problem as specific question(s).

4. Questions for the Workshop

- Pose specific, open-ended questions to the workshop audience that aim for solution exploration.

Example: "How might we structure a network to explore the proposed questions? What HINA approaches are best suited to identify distinct, multi-modal student engagement patterns from our data?"