Carnegie Mellon University

Request for Proposals: GenAI + Education Tools R&D Seed Grants

As part of Carnegie Mellon’s efforts to support and promote the application of generative AI to education, the university is launching a seed grant program for the research and development of generative AI-enabled educational tools. The goals of this program are to:

- Foster CMU research on new generative AI tools for education
- Test and deploy these generative AI tools to enhance education at CMU
- Position awardees to secure additional funding to further develop their work

Examples of possible seed grant proposals include: developing a personalized advising tool; developing a web app that interacts with students to promote their success; building a course- or discipline-specific explainer/hint-giver/tutor; or designing an automated grading and feedback tool.

Eligibility
Applications are open to full-time CMU faculty from any department or location/campus. Cross-departmental teams and junior faculty are encouraged to apply. PhD students may apply as co-PI(s) alongside a faculty PI.

Proposal Submission and Review Process

Proposals must be submitted using this form by COB on April 1, 2024. Key project criteria for proposal review include:

1. The development and testing of an AI-enabled application that addresses a current educational need or creates a new educational opportunity at the post-secondary level.
2. The potential to be applied and studied in the context of the CMU educational experience.
3. Articulates a research and assessment plan that is aligned with project goals as well as with the proposed personnel/resources/timeline.
4. Holds promise to attract additional, extramural funding.

Proposals will be reviewed by a panel of experts, and final funding decisions will be made by the Provost, based on the review panel’s recommendations and in consultation with the dean(s) of the PI(s)/Co-PIs’ respective academic unit(s). Up to five awards are anticipated to be funded.

For those projects awarded a seed grant:

- The intention is to have award funds ready to be used as early as June, 2024.
- An onboarding meeting for all awardees will be held in May or June 2024 with subsequent check-in meetings for teams to share their progress toward project milestones (at least two meetings per year with each team individually and one per year with the full cohort).
- Awardees will be expected to complete a brief annual report by July 15, 2025 (all awards), and by July 15, 2026 (for projects requesting more than one year of funding).
Proposal Format

Proposals must be submitted via this form, which requires the following information:

- Principal (or Co-Principal) Investigators' names, affiliations and emails
- Title of the project
- Abstract (up to 200 words)
- Total budget amount with: breakdown across one or two years; specific dollar amounts requested for different expense categories (e.g., faculty support, graduate student support), including brief justification for each; and amount and type of in-kind personnel support requested, with brief explanation for each. (Note: Projects may be budgeted over 1 or 2 years.)
- Details regarding the project, including ~200-500 words on each of the following:
  - Description of the educational tool to be developed
  - Motivation or need for the tool and how/where it could be deployed at CMU
  - AI-related tools, algorithms, or systems that will be incorporated and how the proposed project leverages them and/or prior work
  - Project plan, including development, testing, and assessment components
  - Expected outcomes and potential impact of the work

Funding and Support

Proposals may request up to $75,000 per year for two years ($150,000 maximum funding per award) to cover faculty salary support, graduate student support and/or other appropriate expenses. These funds are made possible thanks to major funding from the Provost and additional contributions from the School of Computer Science, Simon initiative and Heinz College.

In addition, projects may request in-kind personnel support for software engineering, learning design and/or tool-assessment from the Office of the Vice Provost for Teaching and Learning Innovation. Requests for any in-kind personnel support should be detailed in the proposal submission.

Contact

Faculty members who are considering a proposal submission are strongly encouraged to email vp-tli@andrew.cmu.edu with any questions you have or to set up a time to discuss your proposal ideas in advance of submission.

Proposal Submission Form

The deadline for proposal submission is April 1, 2024.