ORCD Project Olympia

Accelerate Your AI/ML and Beyond Research Fall 2026 Strategic Seed Fund Solicitation

The MIT Office of Research Computing and Data (ORCD) is continuing our strategic Seed Fund initiative. The Seed Fund is one part of a strategic effort supporting infrastructure for applied AI/ML research, creating a powerful AI/ML platform for all of MIT.

During the funding period, project teams will collaborate with ORCD team members, providing feedback on ORCD systems and contributing toward evaluating and improving the ORCD research computing environment for all of MIT.

In this funding round, ORCD is planning to support around 6 project opportunities for one semester of graduate student funding and 3-6 months of enhanced compute resources. Eligible projects will be activities that can usefully leverage ORCD GPU resources to accelerate their research and produce tangible results. Projects will contribute to improving ORCD's platform for the entire MIT community. Projects must be led by someone holding PI status in an MIT DLCI.

We are seeking projects that can leverage multiple ORCD 8-way H200 and B200 GPU nodes to bring research close to publication-ready. Projects suitable for this Seed Fund should have already established a basic level of compute capability and be able to show a promising likelihood of producing impactful results within 6 months or less. Funding support will be provided for graduate student time for the spring semester (see "Awards" section of this document). Projects will also be provided with 3 to 6 months of enhanced access to GPU resources and fast storage to help achieve their research goals. Project participants will be expected to regularly meet with and provide updates to members of the ORCD team.

Successful projects will work closely with the ORCD team to provide guidance on how to deliver an effective platform service for boosting AI/ML research for all at MIT. Ideal projects will be interested both in advancing their own domain research and in contributing meaningfully to growing an ecosystem of openly shared applied AI/ML software and tool knowledge. Innovative closed source projects are of interest, but the ORCD team is particularly interested in projects that might include jointly-publishable, reproducible software artefacts that can be published and shared in open forums such as Zenodo (https://zenodo.org/), or in online publications like the Journal of Open Source Software (JOSS - https://joss.theoj.org/), or in online technology meetings such as the High-Performance Extreme Computing conference (HPEC - https://ieee-hpec.org/).

Eligible projects may be in any domain. Areas of potential interest include:

- Dataset and database development. Novel multi-modal data curation and assembly; domain specific embedding development and testing.

- Application and/or development of foundation models. Models in new areas, including models that could impact areas of interest to MIT strategic initiatives such as health, climate.

- Model tuning. Novel approaches to imposing domain constraints (physical laws, known axioms, prior knowledge) to applied scenarios, including ideas on how to extend physical process emulation models robustly into "out-of-distribution" scenarios.

- Contextual training. Leveraging context windows to shape generative AI system responses in areas from science and engineering process emulation to decision making.

- Infrastructure innovation. Research directions, with domain science applications, around more efficient gradient descent optimization strategies, ML network optimization, information compression and training and inference efficiency, novel software tool chains and hardware/software technologies.

- Innovations in using future floating-point representations, including FP8, FP4 and integer intermediates, for AI/ML and beyond

- Automated testing, checking, analyzing and generation of physical world discrete PDE and ODE models and software.

- Novel uses of GPU systems for research beyond AI/ML domains.

- Principled reinforcement learning to constrain fast PDE emulators to physically consistent solutions

We encourage both open-science and limited access research project teams to apply.

Application process

Interested applicants should submit a short technical narrative (one to two pages, not including references and links) and budget using the MIT Funding Opportunities Portal. (A budget template is provided.) Details can be found on the Seed Fund page of the ORCD website.

Projects should explain how they will realize a goal of accelerating work for a target publication within 6 months and should provide a technical narrative that supports that goal. They should explain the status of their work and plans (including an anticipated timeline) for achieving publication-quality results in the period proposed.

The project description should ideally include: evidence of multi-GPU scaling of proposed computational work (including ensemble-based scaling); evidence of the team's ability to leverage H200 or equivalent based resources; a summary of a proposed publication or other outcome and the results needed to achieve that goal; convergence and other plots where

relevant from standard systems such as weights and biases; an estimated, up to 6 months, timeline for the project; suggestions for how the proposed activity will work with the ORCD team over the project duration. The ORCD team is available to advise groups on how to determine if their project is suited for a Seed Fund cycle and to provide guidance on how to bring a project to an appropriate level of readiness. Email orcd-help@mit.edu with questions.

We anticipate inviting a set of roughly 12 final candidate projects to make brief 15-minute presentations over Zoom in early May.

Awards

In this round, selected projects will receive funds for one or more graduate students (salary and tuition costs) for the spring semester. Funds to cover fund fees (up to 10%) and lab allocations will also be provided, where applicable.

Salary funds for other equivalent positions may be considered, but recipient projects' DLCIs are responsible for funding all related under-recovery costs.

Awarded funding and compute resources will be available beginning in September 2026. Funding will cover the fall semester; compute resources will be available through the beginning of March 2027.

Awarded projects will be expected to participate in 30 minute bi-weekly meetings over the course of the project to review progress, provide feedback on how the ORCD environment is meeting their needs, and discuss how to ensure progress is satisfactory.

Timeline

- Applications must be submitted via the InfoReady portal by **11:59PM ET on Wednesday, March 4, 2026**.

- Finalists will be notified in late April to early May 2026.

- Finalists will be scheduled to give 15-minute presentations over Zoom in early May 2026.

- Award recipients will be notified by mid-July 2026.

- Funds will be transferred and compute resources will be made available in **September 2026**.

- Representatives from projects will attend a kickoff meeting with ORCD staff in **September 2026**.

Future Funding Rounds

We expect to solicit projects every six months. Renewal of awards that have made progress will be considered in subsequent solicitations.

ORCD is actively raising funds to support this program so that, if the approach proves successful, the scope and breadth can grow over time. We are also actively working on access to other GPU resources, including large collections of light-weight inference oriented L40 GPUs and access to next generation NVidia and AMD GPUs.

Questions?

Applicants who have questions can reach out to the ORCD team at orcd-help@mit.edu for guidance.