

UTC Applied AI & Industry Partnerships Initiative: Request for Proposals

Program Overview

The UTC Applied AI & Partnerships Initiative is a pilot funding program designed to catalyze applied artificial intelligence (AI) research with direct, real-world impact through collaboration with industry partners. The initiative positions the UTC Research Institute as a hub for solution-oriented AI research by supporting faculty-led projects that address practical challenges in infrastructure, energy systems, mobility, logistics, workforce development, and related domains.

Projects supported through this initiative are intended to serve as pilot or pre-proposal efforts, enabling teams to develop proof-of-concept solutions, strengthen industry partnerships, and ready themselves to compete for future external funding.

Award Tracks & Funding Structure

This RFP will support approximately eight projects (four for each track), each funded at \$25,000 for a one-year project period.

Proposals must be submitted to one of the following award tracks:

Track A: CEACSE-Funded Applied AI Projects

Projects funded through this track will be supported by the Center of Excellence in Applied Computational Science and Engineering (CEACSE). Proposals submitted to this track must explicitly align with CEACSE's mission and requirements, including a clear computational science and engineering component.

Track B: Applied AI Projects (Non-CEACSE)

These projects may emphasize applied operational or translational uses of AI and are not required to meet CEACSE's statutory computational science and engineering requirements.

Eligibility

Eligible applicants include:

- Any full-time UTC faculty from all colleges, including research faculty.
- Each proposal must include at least one external industry partner.
- Multidisciplinary teams are strongly encouraged.

Project Requirements (All Tracks)

All proposed projects must:

- Focus on applied AI with a clearly articulated real-world use case.

- Demonstrate a well-defined industry-relevant problem and proposed AI-based solution
- Be scoped appropriately for a one-year, \$25,000 pilot project.
- Include a clear plan for future external funding following the project period.

Additional Requirements (Track A: CEACSE)

In addition to the requirements above, proposals submitted to Track A must:

- Explicitly address CEACSE's mission to advance computational science and engineering.
- Clearly describe the computational methods, models, algorithms, or advanced computational techniques that form the central component of the project.

Industry Partner Requirements

All proposals must include:

- At least one external industry partner.
- A letter of support from each industry partner describing:
 - The relevance of the project to the partner's needs
 - The partner's role in project execution
 - Any anticipated contributions (e.g., data access, technical input, pilot deployment)
- Evidence of active participation by the industry partner during the project

Evaluation Criteria

All proposals will be evaluated by a single review committee using the following criteria:

1. Technical Merit and Innovation
2. Relevant and Impact of the Applied AI Use Case
3. Strength of Industry Partnership and Engagement
4. Feasibility and Project Design
5. Potential for Future External Funding

Track-Specific Criterion:

- Track A (CEACSE):
 - Alignment with CEACSE's computational science and engineering mission.
- Track B (Non-CEACSE):
 - Broader disciplinary impact and relevance to strengthening UTC's research portfolio.

Budget Guidelines

Each awarded project will receive up to \$25,000 for a one-year project period. Budgets must be reasonable, well-justified, and aligned with the proposed scope of work.

Allowable Costs

Funds may be used for the following categories

1. Personnel Support
 - a. Faculty summer salary or course buyout
 - b. Graduate student support, including stipends and tuition
 - c. Undergraduate student wages
 - d. Postdoctoral researcher support
2. Fringe Benefits
 - a. Fringe benefits may be requested in accordance with standard UTC rates and must be clearly itemized.
3. Materials and Supplies
 - a. Research-related supplies necessary for project execution
 - b. Software licenses, cloud computing credits, or specialized data access
4. Travel (Limited)
 - a. Travel directly related to project activities, such as:
 - i. Industry partner meetings
 - ii. Pilot deployment or validation activities
 - iii. Conference travel *only if directly tied to dissemination of project results*
5. Other Direct Costs
 - a. Data acquisition or annotation costs
 - b. Costs associated with evaluation, testing, or validation
 - c. Modest participant incentives

Unallowable Costs

Funds may not be used for:

- General-purpose equipment or infrastructure
- Office supplies or administrative support
- Faculty academic-year salary
- Indirect costs (F&A/overhead)

Cost Sharing

Cost sharing is not required for this program. Industry partners are not required to provide financial contributions; however, in-kind support (e.g., data access, technical expertise, validation resources) is strongly encouraged and should be described in the proposal narrative and/or letters of support

Submission Guidelines

Proposals must be submitted as a single combined PDF via email to:

Hannah Archer

Project Manager

UTC Research Institute

Email: hannah-archer@utc.edu

Proposals will be accepted on a rolling basis between April 1st, 2026 until May 30, 2026. Late or incomplete submissions will not be considered. All applications will be reviewed after the last day of submission.

Additionally, **you must self identify which track you are applying to within the body of the email and/or subject line.**

Required Proposal Components

Each submission must include the following components (submitted as one combined PDF attachment):

1. Project Narrative (max. 3 pages, excluding references and letters of support)
 - a. The narrative should address:
 - i. Project overview and objectives
 - ii. Technical approach
 - iii. Industry Partner Engagement
 - iv. Anticipated Outcomes and Impact
 - v. Future External Funding Plan
 - vi. Track-Specific Alignment
 1. Track A (CEACSE): Explicit alignment with CEACSE's goals
 2. Track B (Non-CEACSE): Broader disciplinary relevance and applied impact.
 - b. Formatting Requirements:
 - i. 12-point font; 1-inch margins; standard fonts (e.g., Times New Roman, Arial, Calibri)
2. Detailed Budget
 - a. Proposals must include a detailed line-item budget totaling no more than \$25,000.
3. Budget Justification
 - a. A brief budget justification explaining how each cost supports the proposed project (max. 1 page).
4. Industry Partner Letter of Support

- a. Each proposal must include at least one letter of support from an external industry partner.
- b. Letters must:
 - i. Confirm the partner's commitment to the project
 - ii. Describe the partner's role in project execution
 - iii. Identify any anticipated in-kind contributions