Short-term Project Funding Call from the MathWorks-UC San Diego Collaboration

UC San Diego’s Jacobs School of Engineering, Scripps Institution of Oceanography and Halicioglu Data Science Institute are soliciting proposals for short-term projects for use in curriculum and research development sponsored by MathWorks Inc. A total of $60k is available for this funding round to fund at least five projects. Projects will be jointly supervised by UC San Diego faculty and engineers from the MathWorks US office in Torrance, California.

1. Background

MathWorks, developer of MATLAB & Simulink, has created a discretionary fund at UC San Diego, with the goal of supporting research and education projects within UC San Diego based on competitive selection processes. Funding can be requested for short-term projects. Examples include graduate/undergraduate research projects or part-time support for the development of curriculum materials for undergraduate teaching and labs, assessment tools, teaching/interactive tool development, research education and training tools. The outcome supported projects are expected to be freely open-sourced (BSD license) and/or open to the public.

In addition to funding, MathWorks offers reasonable technical in-kind support for the projects to consult on aspects of software engineering and co-develop content for teaching. Each project will be co-advised by one or more MathWorks engineers.

2. Scope of Call and Funding Criteria

We solicit short proposals for projects starting anytime between August 1, 2022 – July 31, 2023.

This call aims to support initial collaborative MathWorks-UC San Diego proposals fulfilling the following criteria (more than one point should be envisioned):

- **Types of projects**: Coursework development, short-term research projects, Senior Design projects, etc.
- **Sample Domains (including but not limited to)**: Data Science, Artificial Intelligence, Big Data, Machine/Deep Learning, Robotics & Autonomous Systems, Electrification, Environmental Engineering, Atmospheric Sciences, Ocean Sciences, Green Energy, System Engineering, Civil & Structural Engineering.

This is a restricted call for the academics of the Jacobs School of Engineering, Scripps Institution of Oceanography and Halicioglu Data Science Institute. Additional collaborators from other University departments are welcome.

3. Application Process and Evaluation

Applicants should submit a proposal based on the form attached below.

Important Dates: Applications due Aug 1, decisions by Aug 30

**Please fill out this application form**. All proposals will be reviewed by a panel of UC San Diego and MathWorks team members. Shortlisted projects will be invited to a review meeting to introduce their projects briefly, followed by a Q&A session. Projects which are not shortlisted will be given feedback and suggestions. Results will be announced by the 30th August 2022. The assessment is based on the criteria below:

The Review Panel will evaluate all submitted proposals with respect to expected curriculum or research impact, importance/impact of outcome, new directions of research and collaborations, interdisciplinary collaborations, values for money, long-term plans perspectives.

The Review Panel encourages applicants to highlight the criteria mentioned in Section 2 above, as well as the terms and conditions below.
4. Terms and Conditions

- All projects must have a faculty advisor.
- Regular progress reports should be submitted from the start of projects, describing the results and outcomes from the projects, the impact on all stakeholders, and the future plans.
- This program is applicable for Academic Year 2022-2023.
- The outcome supported projects are expected to be freely open-sourced (BSD licensed) and/or open to the public.
- MathWorks software (or MATLAB and/or Simulink) should be the primary tool for the project. Collaborative use with open-source software or other tools is encouraged.
- The projects must utilize MATLAB and/or Simulink. Use of open-source software or other tools is encouraged.
- Ensure that no third-party or infringing materials are used in the materials or software.
- Allow MathWorks to discuss the materials and software (or project, whatever it might be) in any publications or oral presentations.

5. Questions

Follow this link for more information on the collaboration. If you have any questions, please contact:

**UC San Diego:**
- Jacobs School of Engineering: Wil Dyer (wdyer@eng.ucsd.edu) - Director, Corporate Affiliates Program
- Halicioglu Data Science Institute: Erik Mjoen (emjoen@ucsd.edu) - Manager, Industry Relations
- Scripps Institution of Oceanography: Vanessa Scott (vscott@ucsd.edu) - Director, Industry Relations

**MathWorks:**
- Sumit Tandon (standon@mathworks.com) – Customer Success Engineering
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