



**IDETC-CIE 2021**



## **Call for Hackathon Problems – ASME-CIE 2021 Hackathon**

### **BACKGROUND**

The Computer & Information in Engineering (CIE) Division of the American Society of Mechanical Engineers (ASME) launched the first ASME hackathon in August 2020 at the IDETC/CIE 2020 Virtual Conference (<https://event.asme.org/IDETC-CIE-2020/Program/Hackathon>). This successful event was soon followed by a second hackathon during the IMECE 2020 Conference in November (<https://asmehackathon2020.github.io/>). These 24-hour hackathon events provide a unique opportunity for students and engineering practitioners to learn how data science and machine learning techniques can be leveraged to solve real-world engineering problems.

Given the previous resounding successes, the CIE Division will hold a third hackathon at the IDETC/CIE 2021 Virtual Conference as a pre-conference event from Aug. 14-15, 2021. With the goal of creating a platform for crowd innovation and, more importantly, exploring new educational pathways to train the next generation of data-literate mechanical engineers, the hackathon leadership team is now soliciting new topic ideas.

### **The Call**

The CIE Division is looking for interested parties to submit new hackathon problems grounded in real-world applications. Hackathon problems and data sets that are generally related to design, manufacturing, and systems engineering topics are welcome.

A hackathon problem is expected to push the frontiers in the mechanical engineering community, and its scope is appropriate for students to compete and complete within 24 hours. Besides proposing a hackathon problem and the associated data sets, it is expected that the proposer will engage with their specific research communities to promote the hackathon and support the event planning and execution as organizers, mentors, and/or judges. In your proposal, the following information is expected.

- Title of the Hackathon Problem
- Problem Statement (maximum one page)
- Sample Dataset
- Name and Contacts of the Proposer(s)
- Submission requirements and Judging Rubric (tentative)

Proposal submission deadline: **April 15, 2021**. All proposals must be submitted to [idetccie.seikm@gmail.com](mailto:idetccie.seikm@gmail.com). Please contact Yan Lu ([yan.lu@nist.gov](mailto:yan.lu@nist.gov)) or Zhenghui Sha ([zsha@uark.edu](mailto:zsha@uark.edu)), the ASME-CIE Hackathon Chairs, with any questions.