# ASME IDETC-CIE 2024

**International Design Engineering Technical Conferences & Computers and Information in Engineering Conference**

In-Person Event
**JW Marriot Washington**
**Washington, DC, USA** | August 25 – 28, 2024

## 44th Computers and Information in Engineering Conference (CIE) CALL FOR PAPERS
https://event.asme.org/IDETC-CIE

The CIE Division is excited to put out a call for papers for the 44th CIE Conference to be held at JW Marriot Washington, Washington, DC, USA, August 25-28, 2024. All five CIE tracks are soliciting papers in all aspects of computer applications on experimental, numerical, and analytical studies, with emphasis on the highlighted topic areas.

## TRACKS SYMPOSIUM

- Advanced Modeling and Simulation (AMS)
- Computer-Aided Product and Process Development (CAPPD)
- Virtual Environments and Systems (VES)
- Systems Engineering Information Knowledge Management (SEIKM)
- Artificial Intelligence + Machine Learning (AI+ML) Approaches for Engineering

## TRACK SYMPOSIUM topics

- CIE-01 AMS: Advanced Modeling and Simulation (AMS General)
- CIE-02 AMS: Inverse Problems in Science and Engineering
- CIE-03 AMS: Computational Multiphysics Applications
- CIE-04 AMS: Uncertainty Quantification in Simulation and Model Verification & Validation
- CIE-05 AMS: Simulation in Advanced Manufacturing
- CIE-06 AMS: Material Characterization Methods and Applications
- CIE-07 CAPPD: Computer-Aided Product and Process Development (CAPPD General)
- CIE-08 CAPPD: Human-in-the-Loop Product Design and Automation
- CIE-09 CAPPD: Digital Human Modeling for Design and Manufacturing
- CIE-10 CAPPD: Product & Process Design Automation for Industry 4.0
- CIE-11 CAPPD: Data-driven Product Design and Fabrication
- CIE-12 SEIKM: Systems Engineering Information Knowledge Management (SEIKM General)
- CIE-13 SEIKM: Design Informatics
- CIE-14 SEIKM: Systems Engineering and Complex Systems
- CIE-15 SEIKM: Knowledge Capture, Reuse, and Management
- CIE-16 SEIKM: Smart Manufacturing Informatics
- CIE-17 SEIKM: Advanced Manufacturing for Bioeconomy and Circular Economy
- CIE-18 VES:  User Experience (UX) Design for Virtual Environments
- CIE-19 VES: Virtual Systems for Engineering, Healthcare, and Education
- CIE-20 VES: AR/VR for Manufacturing Systems, Hardware and Accessibility
- CIE-21 VES: Industrial Metaverse for Supply Chain and Logistics
- CIE-22 VES: Show-and-Tell
- CIE-23 AI/ML: Approaches for Engineering (AI/ML General)
- CIE-24 AI/ML: AI/ML Best Practices & Data Management
- CIE-25 AI/ML: AI/ML Engineering-Informed Approaches

## CIE JOINT TOPICS

- CIE-26 AMS-CAPPD: Digital Twin: Advanced Human Modeling and Simulation in Engineering
- CIE-27 AMS-SEIKM: Digital Twin Modelling and Analytics for Advanced Manufacturing
- CIE-28 AMS-SEIKM: Physics-Informed Machine Learning for Design and Advanced Manufacturing
- CIE-29 SEIKM-AMS: Artificial Intelligence and Machine Learning in Design and Manufacturing
- CIE-30 AMS-CAPPD-SEIKM: Design, Simulation and Optimization for Additive Manufacturing
- CIE-31 Graduate Student Poster Symposium

## CIE SPECIAL SESSION

- CIE-32 VES: JCISE Spotlight Talks on TBD

Selected papers will be published in ASME *Journal of Computing and Information Science in Engineering* (JCISE). Six Best Papers will be awarded, including CIE Conference Best Paper and AMS, CAPPD, SEIKM VES, AI/ML Best Paper.

## IDETC/CIE WORKSHOPS/TUTORIALS

Please consider the opportunity to submit a proposal for organizing a workshop or tutorial in ASME IDETC-CIE 2024. The submission form can be found at: https://airtable.com/appHQONZoO5yDZYs3/shr8a2eKFEufzCKLA

## CONFERENCE ORGANIZERS

**CONFERENCE CHAIR:** Robert Wendrich
Rawshaping Technology RBSO
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**PROGRAM CHAIR:** Krishna Kaipa
Old Dominion University
Norfolk, Virginia, USA, kkaipa@odu.edu

## IMPORTANT DATES

- **SUBMISSION OF ABSTRACT & FULL-LENGTH PAPER FOR REVIEW**
  March 12, 2024
- **PRESENTATION ONLY EXTENDED ABSTRACT & POSTER SUBMISSION**
  April 22, 2024
- **PAPER REVIEW COMPLETE**
  April 29, 2024
- **DRAFT PAPER AND PRESENTATION ONLY/POSTER EXTENDED ABSTRACT DECISION NOTIFICATION**
  May 06, 2024
- **SUBMISSION OF COPYRIGHT FORM**
  May 24, 2024
- **FINAL PAPER SUBMISSION**
  May 27, 2024