

Industrial Engineering Division Call for Papers

2022 IED Theme: Data Science and Industrial Engineering Education

The **Industrial Engineering Division (IED)** of the American Society for Engineering Education (ASEE) seeks papers for presentation at the 129th ASEE Annual Conference and Exposition in Minneapolis, Minnesota June 26 - 29, 2022.

Relevant submissions are welcome from all engineering disciplines. Considerations for acceptance include the level of innovation, technical merit, demonstrated outcomes and relevance to industrial engineering education. Authors are encouraged to submit work that could be useful to other IE faculty, including strategies for implementation. The IED strongly encourages submissions of diversity, equity and inclusion-related papers. Purely technical **papers that have no educational component** or papers describing courses that will or have not been taught will **most likely not be accepted**.

Topics of interest include, but are not limited to:

- Data science and IE curriculum
 - Data protection
 - Addressing vulnerabilities in the on-field deployment
 - Improving the reliability of deployed systems
 - Privacy-sensitive applications of learning systems
 - Ethical consideration in applications
 - Applications involving explainable aspects of algorithms
 - Validation and verification approaches for learning systems
 - Applications that support broader goals on sustainability, equitability, bias-reduction, social justice, and social good
- Analytics and novel IE curriculum
- Industry 4.0 and novel IE curricula
- Methods for developing and assessing industrial engineering competency
- IE laboratory development
- Application of innovative approaches to IE education (e.g. flipped classes, problem based learning, and use of emerging technologies)
- Educational resources such as case studies, web-based course modules, and lab materials for teaching IE topics
- IE Design throughout the curriculum
- Outstanding IE outreach programs
- Successful IE internship and/or co-op programs
- Involving undergraduates in IE related research
- Success with adapting to new IE ABET outcomes
- Diversity, equity and inclusion in IE: IED would be pleased to submit papers for *ASEE's Best Diversity, Equity, and Inclusion Paper Award* ([ASEE Best Diversity Paper – DEIcommittee](#)). Learn more about how to address these issues in your work here: [Diversity Paper Resources – DEIcommittee \(asee.org\)](#).

The IED is a publish-to-present division. At least one author for each paper must register for and present at the conference. Authors of accepted abstracts will be invited to submit full-length papers for peer review. Papers addressing "work in progress" will be considered. The submission and review process are blind. Do not include the names of institutions or authors anywhere in the abstract or draft paper. All abstracts and papers must be loaded electronically through the ASEE paper management system. **Abstracts submitted for the 2022 conference should be extended abstracts providing sufficient detail on the proposed work for reviewers to evaluate.** Additional information, including the Author's Kit with deadlines and formatting instructions, can be downloaded from the ASEE website. In addition to the ASEE "Publish to Present" requirements, IED requires the support of its authors in "Review to Publish" at both the abstract and manuscript stages.

IED also supports workshops in the areas listed for paper submissions. Persons wishing to have IED promote a workshop for the 2022 Annual Conference should submit their responses to the ASEE workshop form to the program chair to be reviewed for appropriate content.

IED Paper Awards and Travel Grant:

- All accepted papers will be considered for the ***IED Best Paper Award***. The award includes a plaque of recognition for first place, and a letter of recognition for second place (runner-up), when appropriate. There is an honorarium monetary award of \$250 for the first author of the winning paper.
- Qualified authors will be considered for the ***New IE Educator Outstanding Paper Award***. New IE educators with fewer than seven years of full-time teaching experience. The recipient will be awarded \$250 per author, up to \$500 per paper. Senior faculty are eligible for the award as co-authors, but not for the monetary award. The award also includes a plaque of recognition.
- Student-authored papers are eligible for ***IED Outstanding Student Paper Award***. The recipient will be awarded \$250 per author, up to \$500 per paper. Faculty are eligible for the award as co-authors, but not for the monetary award. The award also includes a certificate of recognition.
- IED members who have not attended an ASEE Annual Conference may be eligible for the ***\$500 IE Travel Grant for New Attendees***. Recipients must present their paper in an IED session and can collaborate with other faculty who are active in ASEE. Email the Program Chair at lbosman@purdue.edu if you are interested in applying for the travel grant.

Please forward this message to persons that may be interested in presenting their work, hosting a workshop, or formulating a panel at the 2022 Conference. If you are not a member of the Industrial Engineering Division (IED), please **add the IED to your ASEE membership** renewal. If you have any questions, please contact the program chair.

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