

## 50th ASME Design Automation Conference (DAC)

Dear Colleagues,

On behalf of the DAC Executive Committee, welcome to the 50th ASME Design Automation Conference (DAC)!

Following a rigorous review process, this year's DAC technical program consists of 104 accepted papers in 25 active research areas (corresponding approximately to an acceptance rate of 87%). This year, we also solicited and accepted 46 presentation-only submissions for the second time at DAC. The technical program will be presented from Monday, August 26 to Wednesday, August 28.

Complementing our technical sessions, we will host the DAC 50th Anniversary Signature Event on "Panel on: Successes, Aspirations and Opportunities for Design Automation," consisting of a panel of five senior members of and long-term contributors to DAC:

- Dr. Carolyn Seepersad (Georgia Institute of Technology)
- Dr. Kristina Shea (ETH Zurich)
- Dr. Vadim Shapiro (International Computer Science Institute)
- Dr. Shapour Azarm (University of Maryland)
- Dr. Yan Fu (Ford Motor Company)

Please join us for the DAC Technical Committee Meeting on the evening of Tuesday, August 27. During that meeting, we will also present the Design Automation Dissertation Award (a newly introduced award) winner, the Design Automation Young Investigator Award winner, the Design Automaton Award winner, and the DAC Best Paper Award winner. We look forward to our community coming together, meeting old friends, and making new ones.

Ten papers were identified as "Papers of Distinction" from the accepted papers. These papers are listed below (ordered by paper number and including the assigned session):

- DETC2024-143495: Modeling and Control Co-Design of a Floating Offshore Vertical-Axis Wind Turbine System, by Yong Hoon Lee, Saeid Bayat, James T. Allison, Md Sanower Hossain, D. Todd Griffith
- DETC2024-143593: Drivaernet: A Parametric Car Dataset for Data-Driven Aerodynamic Design and Graph-Based Drag Prediction, by Mohamed Elrefaie, Angela Dai, Faez Ahmed
- DETC2024-143179: Integrated Design for Wave Energy Converter Farms: Assessing Plant, Control, Layout, and Site Selection Coupling in the Presence of Irregular Waves, by Saeed Azad, Suraj Khanal, Daniel R. Herber, Gaofeng Jia
- DETC2024-143204: Studying Changes to the Additive Manufacturability of Design Solutions When Prepared and Simulated in Immersive Virtual Reality, by Jayant Mathur, Scarlett R. Miller, Timothy W. Simpson, Nicholas A. Meisel
- DETC2024-143636: Augmenting Bayesian Inference-Based Damage Diagnostics of Miter Gates Based on Image Translation, by Yichao Zeng, Jice Zeng, Michael D. Todd, Zhen Hu
- DETC2024-143524: Developing Heuristics for Resource Allocation and Utilization in Systems Design: A Hierarchical Reinforcement Learning Approach, by Vikranth S. Gadi, Zoe Szajnfarber, Jitesh H. Panchal

- DETC2024-143810: Increasing Accessibility of 3D-Printed Customized Prosthetics in Resource-Constrained Communities, by Junghun Lee, Chukwuemeka Nkama, Hadiza Yusuf, Joseph Maina, Jean Ikuzwe, Jean Byiringiro, Moise Busogi, Conrad Tucker
- DETC2023-142477: A Hybrid Simulation-Gaussian Process Regression Approach for Performance Prediction and Reconfiguration of Production Layout, by Jongsuk Lee, Seung Ki Moon
- DETC2024-142959: Gaussian Processes for Non-Differentiable Functions With Jump Discontinuities, by Anton van Beek
- DETC2024-143583: Enhancing Long-Term Decision Making in Trajectory Planning: Deep Reinforcement Learning With Knowledge Transfer and Online Demonstrations, by Chuanhui Hu, Yan Jin

Authors from our community will present these and many other excellent papers throughout the conference. We encourage you to support your colleagues by attending their presentations and participating in the discussions.

Finally, organizing the conference requires the generous effort of many individuals. We are particularly grateful to all session organizers and paper review coordinators:

Faez Ahmed, Janet K Allen, A. Emrah Bayrak, Amir Behjat, Bill Bernstein, Amy Bilton, Ramin Bostanabad, Grace Burleson, Wei (Wayne) Chen, Wei Wayne Chen, Souma Chowdhury, Daniel Cooper, Xiaoping Du, Bryony DuPont, Paul Egan, Ehsan Esfahani, Cong Feng, Vincenzo Ferrero, Yan Fu, Payam Ghassemi, Joshua Hamel, Daniel Herber, Zhen Hu, Horea Ilies, Roshni Anna Jacob, Namwoo Kang, Leifur J Leifsson, Mian Li, Ketki Lichade, Xingchen Liu, Yuanzhi Liu, Hemanth Manjunatha, Ali Mehmani, Ali Mehmani, Zhenjun Ming, Farrokh Mistree, Seung Ki Moon, Beshoy Morkos, Venkat Nemani, Julián Norato, Philip Odonkor, Herschel Pangborn, Cyril Picard, Rahul Renu, Daniel Selva, Ada-Rhodes Short, Binyang Song, Eun Suk Suh, Andres Tovar, Anh Tran, Zequn Wang, Kate Whitefoot, Natasha Wright, Zhimin Xi, Hongyi Xu, Nita Yodo, Chen Zeng, Fiona Zhao, Yuqing Zhou

On behalf of the entire DAC community, we welcome you to another enjoyable and thought-provoking Design Automation Conference.

We look forward to seeing you in Washington, DC!

**Chao Hu**

*Conference Chair*

**Zhimin Xi**

*Program Chair*