FAIM 2022
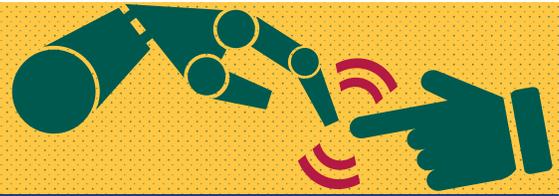## Detroit - USA | June 19-23, 2022
Annual Conference

31st International Conference on Flexible Automation and Intelligent Manufacturing

FAIM 2022

FAIM (Flexible Automation and Intelligent Manufacturing) is a renowned international forum for academia and industry to disseminate novel research, theories, and practices relevant to automation and manufacturing. Over 30 years, the FAIM conference provided a strong and continuous presence in the International Manufacturing scene, addressing both technology and management aspects via scientific conference sessions, workshops, tutorials, and industry tours. Since 1991, FAIM has been hosted in many prestigious Universities on both sides of the Atlantic and, in recent years, in Asia. The conference usually attracts hundreds of global leaders in automation and manufacturing research with program sessions for 250-300 rigorously peer-reviewed papers presented in this multiple-day event. The conference links researchers and industry practitioners in a continuous effort to bridge the gap between research and implementation.

Wayne State University

FAIM 2022 is hosted by Wayne State University, a premier research university serving a diverse body of motivated students in vibrant Midtown, the cultural center of Detroit. The College of Engineering is the center of the Wayne State's history of manufacturing research and Southeast Michigan's history of global leadership in manufacturing, production, and automation.

Theme and topics

The theme of FAIM 2022 is '**Human-Data-Technology Nexus in Intelligent Manufacturing and Next Generation Automation.**' Four thematic pillars in automation and intelligence streams underpin this theme:

Manufacturing processes
- new and innovative processes
- new and innovative processed materials
- precision engineering and manufacturing
- processing at the micro and nano scales

Machine tools
- design and dynamics
- numerical control and mechatronics
- accuracy and metrology
- intelligent machine tools
- process and condition monitoring

Manufacturing Systems
- new manufacturing paradigms
- flexible/ Intelligent automation incl. collaborative robots (RRC, HRC etc.)
- system lifecycle engineering
- process planning, production planning / scheduling / control
- quality control and inspection, TQM
- logistics and supply chain engineering
- ergonomics, health and safety
- education and training

Enabling technologies
- applied artificial intelligence
- machine learning
- virtual / augmented reality and digital twins
- computational geometry
- CAD / CAM
- manufacturing networks and security
- ontologies and information modelling

High visibility refereed publications

All accepted papers presented at FAIM 2022 will be published in *Lecture Notes in Mechanical Engineering* (Springer), indexed by Scopus. Alternatively, authors may opt for submission to *Robotics and Computer-Integrated Manufacturing* (Elsevier), *International Journal of Advanced Manufacturing Technology* (Springer) or *SME Journal of Manufacturing Systems* (Elsevier), following a special 'fast-track' reviewing process. Post-conference special issues for selected papers will appear in the *International Journal of Computer Integrated Manufacturing* (Taylor and Francis) and *Machines* (MDPI).

Detroit

Detroit is the largest city in the midwestern state of Michigan and is also the birthplace of Motown culture. The State of Michigan is home to 17% of total USA vehicle production and 11% of North America vehicle production. Manufacturing in Michigan employs more than 629,000 people and contributes 19% of the state's gross domestic product. The New York Times quoted Detroit as "The Most Exciting City in America." If you have not been to Detroit, you are going to want to see how much it's changed. A few highlights include:

- Belle Isle
- Detroit Institute of Arts
- Eastern Market
- Motown Museum
- Detroit Riverfront and Riverwalk
- Ford Piquette Avenue Plant
- Charles H. Wright Museum of African American History
- The Henry Ford – Museum, Greenfield Village, and Rouge Factory

Comprehensive and balanced conference program

The conference will be held on June 19 – 23, 2022 at the Wayne State University Campus in Midtown Detroit. The program will facilitate high-quality paper presentations, high-caliber keynote speeches, industrial visits, with various social programs focusing on the local cultures in Detroit area.

Further information

Site: www.faimconference.org , email: faim2022conference@gmail.com.
Abstract submission for papers and special sessions deadline: **November 15, 2021**; Full paper submission deadline: **January 31, 2022**; Review results: **March 31, 2022**; Revised manuscript deadline: **April 20, 2022**; Final paper acceptance: **April 30, 2022**.