

Annual Conference of the IEEE Industrial Electronics Society (IECON 2022)

Special Session on “Machine Vision, Control and Navigation”

Organized by

Oleg Sergiyenko (srgnk@uabc.edu.mx)
Autonomous University of Baja California, Mexico

Julio C. Rodríguez-Quiñonez (julio.rodriguez81@uabc.edu.mx)
Autonomous University of Baja California, Mexico

Wendy Flores-Fuentes (flores.wendy@uabc.edu.mx)
Autonomous University of Baja California, Mexico

Moises J. Castro-Toscano (moises.castro@uabc.edu.mx)
Autonomous University of Baja California, Mexico

Jesús E. Miranda-Vega (elias.miranda@itmexicali.edu.mx)
National Technological Institute of Mexico /IT of Mexicali, Mexico

Call for Papers

Theme:

Machine vision is an important element of industry 4.0. Its integration with robot navigation, deep learning, and control solves multiple manufacturing problems, from visual inspection to complex navigation tasks. Moreover, the growing adoption of machine vision technologies will play an important role in emerging technologies such as the spatial web and smart manufacturing. Accordingly, it is important to determine the most effective approaches to machine vision. Although our primary interest is in automatic systems in all their aspects, control, communication, and navigation applications have close relations with these systems. Each contribution, application, or innovation for these fields is welcome in this special session.

Topics of interest include, but are not limited to:

1	Machine Vision and Autonomous Navigation
2	Deep Learning in Machine Vision
3	Visual Inspection in Industry
4	Control of Industrial Robotics
5	Target Detection and Tracking
6	Novel Image Sensor Technologies

Good quality papers may be considered for publication in the IEEE Trans. on Industrial Electronics, subject to further rounds of review.

7	Swarm Robotics
8	Surface Mapping and Recognition
9	Innovative Solutions in Stereo Vision Applications
10	Laser Scanning

Sponsoring IES Technical Committee(s):

IEEE IES Technical Committee on **Control, Robotics, and Mechatronics** <https://crm.ieee-ies.org/>

Submissions Procedure:

All the instructions for paper submission are included in the conference website: <https://iecon2022.org/>

Deadlines:

Full paper submission:	April 15, 2022
Paper acceptance notification:	June 17, 2022
Camera-ready paper submission:	July 29, 2022