



ANNUAL CONFERENCE OF THE IEEE INDUSTRIAL ELECTRONICS SOCIETY

Chicago | Illinois, November 3-6, 2024

Special Session on

Constrained Optimal Control and its Applications in Industrial Electronics

Organized and co-chaired by:

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Call for Papers

Technical Outline of the Session and Topics:

Constrained optimal control enjoys tremendous success across a wide range of industrial and technological settings, owing to its potential for optimizing control performance while guaranteeing input and state constraints satisfaction via online optimization. As a result, the constrained optimal control system exhibits a more appealing performance than that of its counterparts in terms of safety, reliability, and costeffectiveness. This special section aims to provide a comprehensive snapshot of the state-of-the-art constrained optimal control methods and their applications in industrial electronics. On the one hand, emphasis will be given to presenting current achievements of the constrained optimal control and benefits when it is applied to industrial systems; On the other hand, to addressing the challenges when applying the constrained optimal control methods, such as guaranteeing strictly constraint admissibility and keeping online implementation.

Topics of the Session include, but are not limited to:

- Model predictive control
- Dynamic programming with input and state constraints;
- Model predictive static programming;
- Numerical solvers for convex optimization problems.

Author's schedule:

Deadline for submission of special session papers	April 15, 2024
Notification of acceptance	June 10, 2024
Deadline for submission of final manuscript	July 01, 2024

Early submission is highly encouraged for early decision notifications!



All the instructions for paper submission are included in the conference website:

www.iecon-2024.org