

Special Issue

Analysis and Mathematical Modeling of Control Engineering and Path Planning, 2nd Edition

Message from the Guest Editor

Mathematical modeling is a powerful tool in the context of the transition from Industry 4.0 to Industry 5.0. Migrating from industrial automation to industrial autonomy requires the development of digital twins, a cyber representation of the physical system that must be controlled. Cyber representation is based on mathematical models that also comprise the real-time behavior of the physical process along with its control structure. Industrial autonomy is also based on autonomous robots that must react to the changing environment and tasks according to path planning. I am pleased to invite you to publish qualitative papers that present new and improved versions of existing mathematical models that have been designed at various observation and representation scales within an industrial control system and are applicable in control engineering and path planning, along with their qualitative and quantitative analysis.

Guest Editor

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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