Intelligent supervision of adaptive controller

Pregelj Boštjan[1]

[1]Jozef Stefan Institute, Ljubljana, Slovenia

E-mail: bostjan.pregelj@ijs.si

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Abstract: The algorithm for supervision of an indirect adaptive controller using pattern recognition is presented. Industrial adaptive controllers are known to operate unreliably in certain conditions. Even using a dedicated hardware and software, identifying the system at the right time still causes problems in certain cases. The main idea of this paper originates from the fact that a process and system only encounter a few different operating conditions during its life time. Therefore a feasible solution seems to be to "prescribe" strategies for these situations. This work presents development of an intelligent supervisor for adaptive controller, which is now in early stages. For illustration it has been applied for control of two coupled rooms heating and cooling model.

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