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Development of 1-DOF and 2-DOF fuzzy controllers. Applications on servo-systems

Stefan Preitl, Radu-Emil Precup, Zsuzsa Preitl

"Politehnica" University of Timisoara
Bd. V. Parvan 2, 300223 Timisoara, Romania
Tel: +40-256-403229, fax: +40-256-403214
{spreitl, rprecup}@aut.utt.ro, zsuzsa.preitl@aut.upt.ro

Abstract

The tutorial presents structures of one-degree-of-freedm (1-DOF) and two-degree-of-freedom (2-DOF) fuzzy controllers. Mamdani fuzzy controllers are considered and built around the standard proportional-integral-fuzzy controllers. Aspects concerning the design and tuning of these fuzzy controlelrs are given using the transfer of results from the linear design by the Extended Symmetrical Optimum method to the fuzzy design in terms of the modal equivalence principle. The control of servo-systems is considered and various digital simulation results are illustrated.

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To who concern it may we, as organizers of 2004 IEEE-TTTC International Conference on Automation, Quality & Testing, Robotics AQTR 2004 (THETA 14) May 13 – 15 2004, Cluj-Napoca, Romania, confirm and give to **Stefan PREITL**, Radu Precup, Zsuzsa Preitl *(U. "Politehnica" Timisoara, RO)* for presenting the tutorial **"Development of 1-dof and 2-dof Fuzzy Controllers. Applications on Servo-systems"**

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