

# Learning Feedforward Control Of MIMO Nonlinear Systems Using U-Model

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ACTA PRESS ANAHEIM, NINTH IASTED INTERNATIONAL CONFERENCE ON  
CONTROL AND APPLICATIONS; pp: 278-283; Vol: ##

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## Summary

In this paper, a learning feedforward controller (LFFC) using the U-model is proposed for a better tracking control of multivariable nonlinear systems over a finite time interval. The multivariable system is modelled using the U-model and the LFFC is established using Newton-Raphson method. U-model significantly simplifies the online synthesis of the feedforward control law. The proposed technique is verified on 2-link robot manipulator in real-time. The performance of the proposed U-model based LFFC is compared with a number of schemes under varying load conditions.

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