Optimal Output Tracker Using A Time-Weighted Performance Index

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JOHN WILEY SONS LTD, OPTIMAL CONTROL APPLICATIONS METHODS; pp: 55-

62; Vol: 19

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Summary

In this paper we develop necessary conditions for the optimality of discrete system feedback controllers using a performance index imposed of (1) time weighting of the states, (2) steady-state error weighting and (3) weighting of the control gain. The controller performance is demonstrated using an F-14 digital pitch rate controller. (C) 1998 John Wiley Sons, Ltd.

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