

Contents

Preface of the Series Editor — V

Preface of the Volume Editor — VII

B. Vogel-Heuser, J. Folmer, G. Frey, L. Liu, H. Hermanns and A. Hartmanns
Graphical Modeling of Networked Architectures and Real-Time-Requirements for the Analysis of Networked Automation Systems — 1

R. Huber, K. Röbenack, S. Zipser and S. Wagner
Track Estimation: High-Gain Observer vs. Algebraic Derivative Methods — 19

M. Amairi, S. Najar, M. Aoun, Z. Lassoued and M. N. Abdelkrim
OBE-based Set-Membership Parameter Estimation of Fractional Models — 37

K. Röbenack
Improving High Gain Observer Design for Nonlinear Systems Using the Structure of the Linear Part — 57

M. Kchaou and A. Toumi
Fuzzy Network-Based Control for a Class of T-S Fuzzy Systems with Limited Communication — 75

S. Bouallègue, R. Madiouni and J. Haggège
Particle Swarm Optimization-Based Approach for Digital RST Controller Design — 95

D. Galdeano, A. Chemori, S. Krut and P. Fraisse
Optimal Pattern Generator for Dynamic Walking in humanoid Robotics — 115

Ulrich Vogl
Optimal Targeting in Chaos Control, a Discrete Hamiltonian Approach — 141