TM02

Poster Session

13:30-15:30 **Chair1 : Young I. Son (Dong-A Univ., Korea)**
Room : Base 2nd Floor-Zillertal **Chair2 : Hyun-Sik Ahn (Kookmin Univ., Korea)**

TM02-13

Robustness Analysis in a Specified Circle for Perturbed SystemsUsing LMI

Chan Yong Kim, Ga Gue Kim(ETRI, KOREA), byeng Chal Kang, Bong Yeol Chol(KyungPook Nat'l Univ., KOREA)

1. Introduction
2. System Defin
3. Stability Region in Specified Circle of Unstructured Time Invariant Perturbation
4. Example
5. Conclusion
6. References

TM02-14

A Time-Varying Sliding Mode for Robotic Manipulators

Sung-Young Lee, Hae-Jin Jeon, Bong-Yeol Choi(Kyungpook Nat'l Univ., KOREA)

- Introduction
- Dynamics of robotic manipulator
- Time-varying sliding surface
- Fuzzy rule, Membership function
- Application to a two degree robotic manipulator
- Conclusion

TM02-15

An Optimization of Polynomial Neural Networks using Genetic Algorithm

Dong-Won Kim, Jang-Hyun Park(Korea Univ., KOREA), Sung-Hoe Huh(SKorea Univ., KOREA), Pil-Sang Yoon, Gwi-Tae Park(Korea Univ., KOREA)

- Abstract
- Introduction
- Genetic Algorithm
- Evolutionary structure optimization of PNN
- Simulation result
- Conclusion
- References

TM02-16

Simple PD+I-type fuzzy controller design

Jae-Hyoung Kim, Ji-Hoon Kim, Bong-Yeol Choi(Kyungpook Nat'l Univ., KOREA)

- Introduction
- Simple PD-type Fuzzy Controller
- Simple PD+I-type fuzzy controller design
- Simulation
- Conclusion
- References

TM02-17

A new identification method for MIMO Hammerstein nonlinear processes

Yong Joon Lee, Su Whan Sung, Sunwon Park(KAIST, KOREA)

1. Introduction
2. Development of the Proposed Identification Method
   2.1 MIMO Hammerstein nonlinear process
   2.2 Process activation
   2.3 Identification of the linear dynamic subsystem
   2.4 Identification of the nonlinear static function
3. Simulation Study
4. Conclusion

Acknowledgment
References

TM02-18

Parameter Estimation of The Distributed System via Improved Block Pulse Coefficients Estimation

Tai-hoon Kim(KISA, KOREA), Jae-sun Shim(Samchok Nat'l Univ., KOREA)

In these days, Block Pulse functions are used in a variety of fields such as the analysis and controller design of the systems. In applying the Block Pulse function technique to control and systems science, the integral operation of the Block Pulse series plays important roles. This is because differential equations are always involved in the representations of continuous-time models of dynamic systems, and differential operations are always approximated by the corresponding Block Pulse series through integration operational matrices.
In order to apply the Block Pulse function technique to the problems of continuous-time dynamic systems more efficiently, it is necessary to find th...