Online identification of evolving Takagi-Sugeno-Kang fuzzy models for crane systems

By: Precup, RE (Precup, Radu-Emil)[1]; Filip, HI (Filip, Horatiu-Ioan)[1]; Radac, MB (Radac, Mircea-Bogdan)[1]; Petriu, EM (Petriu, Emil M.)[2]; Preitl, S (Preitl, Stefan)[1]; Dragos, CA (Dragos, Claudia-Adina)[1]

View ResearcherID and ORCID

APPLIED SOFT COMPUTING
Volume: 24 **Pages:** 1155-1163
DOI: 10.1016/j.asoc.2014.01.013
Published: NOV 2014
View Journal Impact

Abstract

This paper suggests new evolving Takagi-Sugeno-K
systems. A set of evolving TSK fuzzy models with di
relatively simple and transparent implementation of a
algorithm to guide modeling is proposed on the basis
factors after the first step of the online identification a
rule bases and parameters which continuously evolv
power and by modifying existing rules and paramete
this regard. The algorithm is applied in the framewor
equipment. The evolving TSK fuzzy models are teste

Citation Network

21 Times Cited
58 Cited References
View Related Records
Create Citation Alert
(data from Web of Science Core Collection)

APPLIED SOFT COMPUTING

Impact Factor

3.541	3.811
2016	*5 year*

JCR® Category	*Rank in Category*	*Quartile in Category*
COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE	**21 of 133**	**Q1**
COMPUTER SCIENCE, INTERDISCIPLINARY APPLICATIONS	**14 of 105**	**Q1**

with other TSK fuzzy models and modeling approach
the proposed evolving TSK fuzzy models are simple
data and that these models outperform other TSK fu
reserved.

Keywords

Author Keywords: Crane systems; Evolving Takagi
algorithms; Pendulum-crane laboratory equipment; R

KeyWords Plus: INPUT SELECTION; INFERENCE
NETWORK; OPTIMIZATION; CONTROLLER; ALGO

Data from the 2016 edition of Journal Citation Reports

Publisher
ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

ISSN: 1568-4946
eISSN: 1872-9681

Research Domain
Computer Science

Close Window

TSK

Author Information

Reprint Address: Precup, RE (reprint author)

+ Politech Univ Timisoara, Dept Automat & Appl Informat, Bd V Parvan 2, RO-300223 Timisoara, Romania.

Addresses:

+ [1] Politech Univ Timisoara, Dept Automat & Appl Informat, RO-300223 Timisoara, Romania

+ [2] Univ Ottawa, Sch Elect Engn & Comp Sci, Ottawa, ON K1N 6N5, Canada

E-mail Addresses: radu.precup@aut.upt.ro; filiphoratiu@yahoo.com; mircea.radac@aut.upt.ro; petriu@eecs.uottawa.ca; stefan.preitl@aut.upt.ro; claudia.dragos@aut.upt.ro

Funding

Funding Agency	Grant Number
Partnerships in priority areas - PN II program of the Romanian National Authority for Scientific Research ANCS, CNDI-UEFISCDI	PN-II-PT-PCCA-2011-3.2-0732
NSERC of Canada	

View funding text

Publisher

This record is from:
Web of Science Core Collection
- Science Citation Index Expanded

Suggest a correction

If you would like to improve the quality of the data in this record, please suggest a correction.

ELSEVIER SCIENCE BV, PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Categories / Classification

Research Areas: Computer Science

Web of Science Categories: Computer Science, Artificial Intelligence; Computer Science, Interdisciplinary Applications

Document Information

Document Type: Article

Language: English

Accession Number: WOS:000343138500096

ISSN: 1568-4946

eISSN: 1872-9681

Journal Information

Table of Contents: Current Contents Connect

Impact Factor: Journal Citation Reports

Other Information

IDS Number: AQ9CI

Cited References in Web of Science Core Collection: 58

Times Cited in Web of Science Core Collection: 21