1. Record Nr. UNINA9910346897403321

Autore	Krogmann Klaus
Titolo	Reconstruction of Software Component Architectures and Behaviour Models using Static and Dynamic Analysis
Pubbl/distr/stampa	KIT Scientific Publishing, 2012
ISBN	1000025617
Descrizione fisica	1 online resource (XVII, 371 p. p.)
Collana	The Karlsruhe Series on Software Design and Quality / Ed. by Prof. Dr. Ralf Reussner
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Model-based performance prediction systematically deals with the evaluation of software performance to avoid for example bottlenecks, estimate execution environment sizing, or identify scalability limitations for new usage scenarios. Such performance predictions require up-to-date software performance models. This book describes a new integrated reverse engineering approach for the reconstruction of parameterised software performance models (software component architecture and behaviour).

2. Record Nr. UNINA9910437897003321

Autore	Boiko Igor
Titolo	Non-parametric tuning of PID controllers : a modified relay-feedback-test approach / / Igor Boiko
Pubbl/distr/stampa	London ; ; New York, : Springer, 2012, c2013
ISBN	9786613934734 9781283622288 1283622289 9781447144656 1447144651
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (195 p.)
Collana	Advances in industrial control, , 1430-9491
Disciplina	629.83
Soggetti	PID controllers Automatic control Control theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Non-parametric Method of Tuning of PID Controllers -- Precise Model of Modified Relay Feedback Test and Parametric Tuning -- Software for Loop Tuning in DCS.
Sommario/riassunto	The relay feedback test (RFT) has become a popular and efficient tool used in process identification and automatic controller tuning. Non-parametric Tuning of PID Controllers couples new modifications of classical RFT with application-specific optimal tuning rules to form a non-parametric method of test-and-tuning. Test and tuning are coordinated through a set of common parameters so that a PID controller can obtain the desired gain or phase margins in a system exactly, even with unknown process dynamics. The concept of process-specific optimal tuning rules in the nonparametric setup, with corresponding tuning rules for flow, level pressure, and temperature control loops is presented in the text. Common problems of tuning accuracy based on parametric and non-parametric approaches are addressed. In addition, the text treats the parametric approach to tuning based on the modified RFT approach and the exact model of

oscillations in the system under test using the locus of a perturbedrelay system (LPRS) method. Industrial loop tuning for distributed control systems using modified RFT is also described. Many of the problems of tuning rules optimization and identification with modified RFT are accompanied by MATLAB® code, downloadable from http://extras.springer.com to allow the reader to duplicate the results. Non-parametric Tuning of PID Controllers is written for readers with previous knowledge of linear control and will be of interest to academic control researchers and graduate students and to practitioners working in a variety of chemical- mechanical- and process-engineering-related industries. Advances in Industrial Control aims to report and encourage the transfer of technology in control engineering. The rapid development of control technology has an impact on all areas of the control discipline. The series offers an opportunity for researchers to present an extended exposition of new work in all aspects of industrial control. Non-parametric Tuning of PID Controllers is written for readers with previous knowledge of linear control and will be of interest to academic control researchers and graduate students and to practitioners working in a variety of chemical- mechanical- and process-engineering-related industries. Advances in Industrial Control aims to report and encourage the transfer of technology in control engineering. The rapid development of control technology has an impact on all areas of the control discipline. The series offers an opportunity for researchers to present an extended exposition of new work in all aspects of industrial control. .