Synthesis and Control of Flexible Systems with Component-Level Uncertainties

By -

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 22 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.An efficient and computationally robust method for synthesis of component dynamics is developed. The method defines the interface forcesmoments as feasible vectors in transformed coordinates to ensure that connectivity requirements of the combined structure are met. The synthesized system is then defined in a transformed set of feasible coordinates. The simplicity of form is exploited to effectively deal with modeling parametric and non-parametric uncertainties at the substructure level. Uncertainty models of reasonable size and complexity are synthesized for the combined structure from those in the substructure models. In particular, we address frequency and damping uncertainties at the component level. The approach first considers the robustness of synthesized flexible systems. It is then extended to deal with non-synthesized dynamic models with component-level uncertainties by projecting uncertainties to the system level. A numerical example is given to demonstrate the feasibility of the proposed approach. This item ships from La Vergne,TN. Paperback.

READ ONLINE
[2.96 MB]

Reviews

Very beneficial for all type of folks. It can be rally intriguing throgh studying time. You will like how the writer publish this ebook.
-- Nathan Cruickshank

Totally one of the better pdf I have at any time read through. It really is simplified but shocks within the 50 % from the ebook. Once you begin to read the book, it is extremely difficult to leave it before concluding.
-- Mariano Spinka