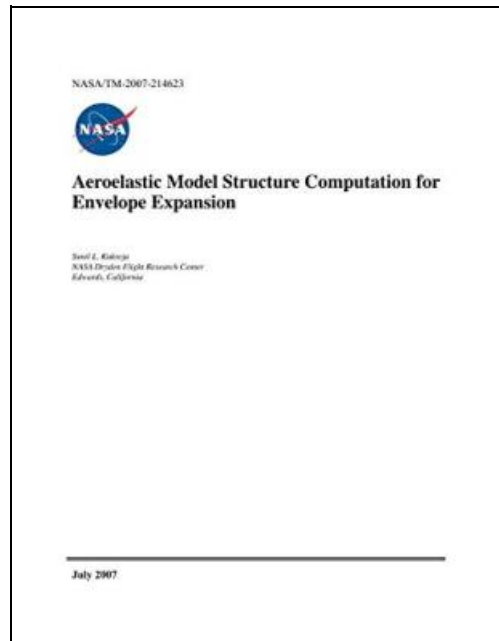


## Aeroelastic Model Structure Computation for Envelope Expansion (Paperback)



Filesize: 1.2 MB

### ***Reviews***

*This publication is wonderful. It can be rally fascinating throug reading period of time. You are going to like the way the writer create this publication.*

*(Mrs. Piper Jacobi)*

**AEROELASTIC MODEL STRUCTURE COMPUTATION FOR ENVELOPE EXPANSION (PAPERBACK)****DOWNLOAD**

Independently Published, United States, 2019. Paperback. Condition: New. Language: English. Brand new Book. Structure detection is a procedure for selecting a subset of candidate terms, from a full model description, that best describes the observed output. This is a necessary procedure to compute an efficient system description which may afford greater insight into the functionality of the system or a simpler controller design. Structure computation as a tool for black-box modeling may be of critical importance in the development of robust, parsimonious models for the flight-test community. Moreover, this approach may lead to efficient strategies for rapid envelope expansion that may save significant development time and costs. In this study, a least absolute shrinkage and selection operator (LASSO) technique is investigated for computing efficient model descriptions of non-linear aeroelastic systems. The LASSO minimises the residual sum of squares with the addition of an  $l_1$  penalty term on the parameter vector of the traditional  $l_2$  minimisation problem. Its use for structure detection is a natural extension of this constrained minimisation approach to pseudo-linear regression problems which produces some model parameters that are exactly zero and, therefore, yields a parsimonious system description. Applicability of this technique for model structure computation for the F/A-18 (McDonnell Douglas, now The Boeing Company, Chicago, Illinois) Active Aeroelastic Wing project using flight test data is shown for several flight conditions (Mach numbers) by identifying a parsimonious system description with a high percent fit for cross-validated data. Kukreja, Sunil L. Armstrong Flight Research Center NASA/TM-2007-214623, H-2736, AIAA Paper 2007-2317.

[Read Aeroelastic Model Structure Computation for Envelope Expansion \(Paperback\) Online](#)[Download PDF Aeroelastic Model Structure Computation for Envelope Expansion \(Paperback\)](#)

## Other Books



### **Spanked by Santa: A Christmas Fantasy (Paperback)**

Createspace Independent Publishing Platform, United States, 2016. Paperback. Condition: New. Language: English. Brand new Book. When Chrissy is woken on the night of Christmas Eve by the jingling of bells and clattering of hooves on...

[Download](#) [Book](#)

»



### **The Business Student's Handbook: Skills for Study and Employment (Paperback)**

Pearson Education Limited, United Kingdom, 2016. Paperback. Condition: New. 6th New edition. Language: English. Brand new Book. 'It is very clear and easy to understand and well laid out. A good key text.' Alison Bragg,...

[Download](#) [Book](#)

»



### **An Undergraduate Introduction to Financial Mathematics (3rd edition)**

World Scientific Publishing Co Pte Ltd. Hardback. Condition: new. BRAND NEW, An Undergraduate Introduction to Financial Mathematics (3rd edition), J. Robert Buchanan, This textbook provides an introduction to financial mathematics and financial engineering for undergraduate...

[Download](#) [Book](#)

»



### **Managing Technical Debt: Reducing Friction in Software Development, 1/e (Paperback)**

Pearson Education (US), United States, 2019. Paperback. Condition: New. Language: English. Brand new Book. "This is an incredibly wise and useful book. The authors have considerable real-world experience in delivering quality systems that matter, and...

[Download](#) [Book](#)

»



### **The Alhambra: Collection of Essays, Verbal Sketches, and Stories (Paperback)**

Independently Published, United States, 2018. Paperback. Condition: New. Language: English. Brand new Book. The Alhambra is a collection of essays, verbal sketches, and stories by Washington Irving. Background Irving lived at the Alhambra Palace while writing some...

[Download](#) [Book](#)

»