

ORDER REDUCTION USING POLE CLUSTERING AND MIXED MATHEMATICAL METHOD

*A project report submitted in partial fulfillment of the requirements
For the award of the degree of*

BACHELOR OF TECHNOLOGY IN ELECTRICAL & ELECTRONICS ENGINEERING

Submitted by

**A PRAMOD
(15811A0201)**

**K TEJA KALA GOWRI
(15811A0210)**

**P BHARGAVI
(15811A0218)**

**B PRAVEEN KUMAR
(15811A0203)**

**M RAVI
(15811A0215)**

**P SURYA SUREKHA
(15811A0219)**

Under the Esteemed Guidance of

**Mr. R GANESH
Assistant Professor**



**DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING**

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Permanently Affiliated to Jawaharlal Nehru Technological University, Kakinada, AP)

(An NAAC Accredited Institution)

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(An NAAC Accredited Institution)
Tamaram, Narsipatnam, Visakhapatnam-531113

**DEPARTMENT OF
ELECTRICAL AND ELECTRONICS ENGINEERING**



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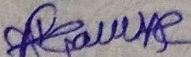
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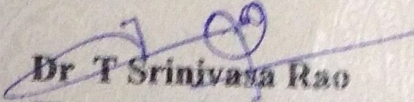
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2018-2019


Internal Guide
Mr. R Ganesh
Assistant. Professor
Dept. of Electrical & Electronics Engg.
AIET, Narsipatnam.


Dr. T Srinivasa Rao
Head of the Department
Dept. of Electrical & Electronics Engg.
Avanthi Institute of Engg. & Tech.
Narsipatnam.

ABSTRACT

Page No

In this project a method is proposed for finding stable reduced order models of single-input-single-output large scale systems using Factor division algorithm and the mixed mathematical method. The denominator polynomial of the reduced order model with respect to original model is determined by forming the clusters of the numerator polynomial with respect to original model are obtained by using the mixed mathematical method. The mixed methods are simple and guarantee the stability of the reduced model if the original system is stable. The methodology of the proposed methods illustrated with the help of examples from literature.

Model Order Reduction	1
1.1 Necessity of Model Reduction	1
CHAPTER - 1 INTRODUCTION TO HIGHER ORDER REDUCTION METHODS	(5-21)
2.1 Introduction	5
2.2 Different types of Reducing Methods	6
2.3 Model Matching Method	7
2.3.1 Reduction Procedure	7
2.3.2 Drawbacks	9
2.4 Canonical Factor Method	9
2.4.1 Reduction Procedure	9
2.4.2 Drawbacks	11
2.5 Stability Criterion Method	11
2.5.1 Procedure	11
2.5.2 Drawbacks	12
2.6 Padé Approximation Method	12
2.6.1 Reduction Procedure	12
2.6.2 Drawbacks	13