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DOI: 10.14419/ijet.v7i4.30.22007 Suparman, Mohd Saifullah Rusiman

Hierarchical Bayesian Estimation for Stationary Autoregressive Models Using Reversible Jump MCMC Algorithm



# [IJET] [15833] Submission Acknowledgement

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To: Dr Suparman Suparman <suparman@pmat.uad.ac.id>

Thu, Jul 19, 2018 at 4:13 PM

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Authors Suparman.

Title Change-time detection in moving average model based on reversible jump MCMC

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Original file IJET-15833.DOC 2018-07-19

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Submitter Suparman Suparman □

Date submitted July 19, 2018 - 05:13 AM

Section Articles
Editor Eric Lui

Abstract Views 64

# **Author Fees**

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# **Status**

Status Published Vol 7, No 4 (2018)

Initiated 2019-05-27 Last modified 2020-01-07

# **Submission Metadata**

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Name Suparman.

Affiliation Universitas Ahmad Dahlan, Indonesia

Country Indonesia

Bio Statement —

Principal contact for editorial correspondence.

# Title and Abstract

Title Change-time detection in moving average model based on reversible jump MCMC

algorithm

Abstract

A piecewise moving average is a model that is more flexible than the moving average model. If the piecewise moving average is used to model data, the model parameters are unknown. The model parameters include the number of models, model coefficients, and white noise variance. This paper discusses the parameter estimation of the piecewise moving average model. Parameter estimation is done using the hierarchical Bayesian approach. Bayes estimators are calculated using the reversible jump Markov chain Monte Carlo algorithm. The performance of the algorithm is tested using synthesis data. The results showed that the reversible jump Markov chain Monte Carlo algorithm can estimate the parameters of the piecewise moving average model well.

# Indexing

Keywords Bayes Method; Monte Carlo Method; Piecewise Linear; Parameter Estimation; Signal

Detection.

Language —

# **Supporting Agencies**

Agencies —

### References

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Authors

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algorithm

Section

Articles

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Eric Lui 🕮

# **Peer Review**

# Round 1

Initiated 2018-07-19 Last modified 2018-07-25 Uploaded file None

# **Editor Decision**

Decision Accept Submission 2019-03-29

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Reply-To: "Prof. Eric M. Lui" <emlui@syr.edu>
To: Suparman Suparman <suparman@pmat.uad.ac.id>

Thu, Jul 26, 2018 at 5:16 AM

### Dear Suparman Suparman:

We have reached a decision regarding your submission to International Journal of Engineering & Technology, "Change-Point Detection in Moving Average Model Using Reversible Jump MCMC Algorithm".

Our decision is: Revisions required. Please find the review result as attachment.

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Yours sincerely,

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the novel elements.

The authors are expected to clearly identify and demonstrate the novel contributions of their paper, this would justify their work. A combination of theoretical and experimental methods, where applicable, should be employed and clearly described in the paper. The conclusions should be substantial and well supported by analysis and results. The quality of the English and of the artwork has to be in line with the standards of the Journal. The presentation should be clear and focused on

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Reply-To: Hind Abu Sadeh <hindabusadehhh@gmail.com>
To: Suparman Suparman <suparman@pmat.uad.ac.id>

Fri, Mar 29, 2019 at 5:56 PM

Dear Suparman Suparman:

We are happy to inform you that after positive referee reports your paper "Change-Point Detection in Moving Average Model Using Reversible Jump MCMC Algorithm" has been accepted for publication in International Journal of Engineering & Technology.

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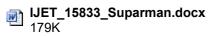
Suparman P Mat <suparman@pmat.uad.ac.id> To: Hind Abu Sadeh <hindabusadehhh@gmail.com> Tue, Apr 30, 2019 at 9:55 PM

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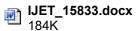
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