

COMPUTATIONAL STATISTICS: TIME SERIES AND DATA MINING  
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by

Tom Smith

Graduate Program in Statistics and Actuarial Science

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The University of Western Ontario  
London, Ontario, Canada

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THE UNIVERSITY OF WESTERN ONTARIO  
School of Graduate and Postdoctoral Studies

**CERTIFICATE OF EXAMINATION**

Supervisor:

.....  
Dr. A. I. McLeod

Joint Supervisor:

.....  
Dr. A. Manning

Supervisory Committee:

.....  
Dr. W. J. Braun

.....  
Dr. A. Bing

Examiners:

.....  
Dr. Q. Ring

.....  
Dr. W. Fing

.....  
Dr. G. Hing

The thesis by

**Tom Smith**

entitled:

**Computational Statistics: Time Series and Data Mining**

is accepted in partial fulfillment of the  
requirements for the degree of  
Masters of Science

.....  
Date

.....  
Chair of the Thesis Examination Board

## **Abstract**

This is a really silly abstract.

**Keywords:** Time series analysis, data mining

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# Chapter 1

## Time series: Long memory

Here is a picture of a long memory time series.



Figure 1.1: A long memory time series

Here's a table.

$n$	$\alpha$	$n\alpha$	$\beta$
1	0.2	0.2	5
2	0.3	0.6	4
3	0.7	2.1	3

Table 1.1: A random table



$$y = mx + b \quad (1.1)$$

$$= ax + c \quad (1.2)$$

This is an un-numbered equation, along with a numbered one.

$$\begin{aligned} u &= px \\ p &= P(X = x) \end{aligned} \quad (1.3)$$

Look at Table 1.1 and Figure 1.1 and equations 1.1, 1.2, and 1.3.  
Let's do some matrix algebra now.

$$\det \left( \begin{pmatrix} 2 & 3 & 5 \\ 4 & 4 & 6 \\ 9 & 8 & 1 \end{pmatrix} \right) = 42 \quad (1.4)$$

In the equation and eqnarray environments, you don't need to have the dollar sign to enter math mode.

$$\alpha = \beta_1 \Gamma^{-1} \quad (1.5)$$

This is citing a reference [2]. This is citing another [3]. Nobody said something [1].

# Chapter 2

## Theorems

### 2.1 Basic Theorems

**Theorem 2.1.1**  $e^{i\pi} = -1$

# Bibliography

[1] Nobody Jr. My article, 2006.

[2] ME. Oh, my! 1990.

[3] Mr. X. *Mr. X Knows BibTeX*. AWOL, 2005.

# Appendix A

## Proofs of Theorems

### Proof of Theorem 2.1.1

$$e^{i\pi} = \cos(\pi) + i \sin(\pi) \tag{A.1}$$

$$= -1 \tag{A.2}$$

■

# Curriculum Vitae

**Name:** Tom Smith

**Post-Secondary  
Education and  
Degrees:** La La School  
La La Land  
1996 - 2000 M.A.

University of Western Ontario  
London, ON  
2008 - 2012 Ph.D.

**Honours and  
Awards:** NSERC PGS M  
2006-2007

**Related Work  
Experience:** Teaching Assistant  
The University of Western Ontario  
2008 - 2012

## **Publications:**

La La