TIP notes 2012/13

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Abstract

This subject introduces the tools for the analysis, modeling, prediction and simulation of time series. The models considered include advanced modeling techniques, such as non-linear models, non-parametric models, neural networks, Bayesian methods, etc. We will also consider learning, control and information processing problems in dynamical environments and in the presence of uncertainty. The presentation is structured around practical applications that involve the analysis of environmental, financial, biological or medical time series.

Revision history									
HDL version	Module	Date							
0.1	First notes	February 5, 2013							

Contents

1	\mathbf{Str}	ucture												1
	1.1	Intended use	 		 •								•	2
\mathbf{A}	Cla	sses												2

List of Tables

List of Figures

1 Structure

It is recommended to take a look to the I2C standard before continue reading.

1.1 Intended use

A Classes

Session	Date	Contents
2	January 29, 2013	Wiener process
		Ito convention for SDE
3	January 31, 2013	Arithmetic Brownian
		Geometric Brownian
		Random Number Generator
		Newton-Rhapson