

Dear editor,

The present authors, Daniel G. Silva, Denis G. Fantinato, Jânio C. Canuto, Leonardo T. Duarte, Aline O. Neves, Ricardo Suyama, Jugurta Montalvão and Romis Attux, would like to submit the paper “An Introduction to Information Theoretic Learning, Part I: Foundations” to be analyzed for publication as a Tutorial Paper in the Journal of Communication and Information Systems.

This is a two-part tutorial that intends to describe the main proposals and concepts that comprise information theoretic learning (ITL), a recent research field that proposes a modeling method for adaptive linear / nonlinear systems with a wealthier statistical treatment of the optimization criterion. In the first part of this tutorial, we introduce the fundamental concepts of ITL and a key set of estimators that enable the implementation of algorithms, in the context of a wider view independent of the differentiability property. The second part of the tutorial, which is devoted to describe examples of ITL applications, is also being submitted to JCIS as a separate work.

Contacts:

Daniel G. Silva (corresponding author)

e-mail: [daniel.guerreiro@gmail.com](mailto:daniel.guerreiro@gmail.com) (preferred); [danielgs@ene.unb.br](mailto:danielgs@ene.unb.br)

Address: Faculdade de Tecnologia (FT) – Departamento de Engenharia Elétrica (ENE) – Universidade de Brasília (UnB)

Campus Darcy Ribeiro,  
Brasília – DF. Brasil.

Denis G. Fantinato

e-mail: [denisgf@dca.fee.unicamp.br](mailto:denisgf@dca.fee.unicamp.br)

Jânio C. Canuto

e-mail: [janio.canuto@gmail.com](mailto:janio.canuto@gmail.com)

Leonardo T. Duarte

e-mail: [leonardo.duarte@fca.unicamp.br](mailto:leonardo.duarte@fca.unicamp.br)

Aline O. Neves

e-mail: [aline.neves@ufabc.edu.br](mailto:aline.neves@ufabc.edu.br)

Ricardo Suyama

e-mail: [ricardo.suyama@ufabc.edu.br](mailto:ricardo.suyama@ufabc.edu.br)

Jugurta Montalvão

e-mail: [jmontalvao@ufs.br](mailto:jmontalvao@ufs.br)

Romis Attux

e-mail: [attux@dca.fee.unicamp.br](mailto:attux@dca.fee.unicamp.br)

The paper has not been submitted to any other journal or congress.

Best regards,

The authors.