

News / Anuncios

CONFERENCE-PLACE /CONFERENCIA-LUGAR	DATE AND CONTACTS/FECHA Y CONTACTOS
SPRING SCHOOL "DATA SCIENCE, MACHINE LEARNING AND OPTIMIZATION" MONTREAL - CANADA	MAY 2-3, 2020 MAHJOUB@LAMSADE.DAUPHINE.FR
6TH INTERNATIONAL SYMPOSIUM ON COMBINATORIAL OPTIMIZATION - MONTREAL - CANADA	MAY 4-6, 2020 MAHJOUB@LAMSADE.DAUPHINE.FR
MICRADS'20 - THE 2020 MULTIDISCIPLINARY INTERNATIONAL CONFERENCE OF RESEARCH APPLIED TO DEFENSE AND SECURITY QUITO; ECUADOR	MAY, 13-15, 2020 HTTP://WWW.MICRADS.ORG/
4TH INTERNATIONAL CONFERENCE ON SIMULATION, MODELING AND OPTIMIZATION (CSMO 2020) XI'AN, CHINA	MAY 21, 2020 - MAY 24, 2020 EI/SCOPUS-CSMO 2020
PROMETHEE DAYS 2020 RABAT, MOROCCO	JUNE 2-4 2020 WWW.PROMETHEE-DAYS.COM
33RD CONFERENCE OF THE EUROPEAN CHAPTER ON COMBINATORIAL OPTIMIZATION SAINT PETERSBURG, RUSSIA	JUN 4- 6, 2020 ECCO 2020
THE 11TH ASIAN CONFERENCE ON FIXED POINT THEORY AND OPTIMIZATION SIAM BAYSHORE HOTEL, THAILAND	JUL 15-18, 2020 ACFPTO 2020
18TH INTERNATIONAL CONFERENCE ON PRACTICAL APPLICATIONS OF AGENTS AND MULTI-AGENT SYSTEMS L'AQUILA (ITALY)	JUNE,17-19, 2020 HTTPS://WWW.PAAMS.NET/
SPECIAL SESSION ON BENCHMARKING OF EVOLUTIONARY ALGORITHMS FOR DISCRETE OPTIMIZATION GLASGOW, UK	JUL 19-24, 2020 BEADO 2020
METAHEURISTICS SUMMER SCHOOL 2020 :: LEARNING & OPTIMIZATION FROM BIG DATA CATANIA, ITALY	JUL 27-31, 2020 MESS 2020

CONFERENCE-PLACE /CONFERENCIA-LUGAR	DATE AND CONTACTS/FECHA Y CONTACTOS
THE 22ND CONFERENCE OF THE INTERNATIONAL FEDERATION OF OPERATIONAL RESEARCH SOCIETIES (IFORS 2020) SEOUL, SOUTH KOREA	JUNE 21-26, 2020 HTTP://WWW.IFORS2020.KR
10TH WORLD CONGRESS IN PROBABILITY AND STATISTICS/IMS ANNUAL MEETING SEOUL, SOUTH KOREA	AUGUST 17 – 21, 2020 HTTP://WWW.SIAM.ORG/MEETINGS
2021 JOINT STATISTICAL MEETINGS /IMS ANNUAL MEETING SEATTLE, USA	AUGUST 7, 2021 - AUGUST 12, 2021 HTTPS://IMSTAT.ORG/MEETINGS-CALENDAR/
INTERNATIONAL CONFERENCE ON PROBABILITY AND STATISTICS LONDON, UNITED KINGDOM	NOVEMBER 18-19, 2021 HTTPS://WASET.ORG/PROBABILITY-AND-STATISTICS-CONFERENCE-IN-NOVEMBER-2021-IN-LONDON
21AU12ICEMPSM SYDNEY, AUSTRALIA	DECEMBER 02-03, 2021 HTTPS://WASET.ORG/ENVIRONMENTAL-MONITORING-PARAMETERS-AND-SAMPLING-METHODS-CONFERENCE-

WORKSHOP ON THE ANALYSIS OF HIGH DIMENSIONAL DATA FOR BIOINFORMATICS APPLICATIONS USING R: AN INTRODUCTION

Supported by the project “A Cuban-Flemish Training and Research Program in Data Science and Big Data” was developed at Universidad de La Habana a workshop where professors Ziv Shedky and gave a series of talks, organized seminars and trained in the use of R-supported softwares.

The workshop consisted of a basic course in data analysis for bioinformatics, focusing on the analysis of High dimensional data for Bioinformatics applications. A basic knowledge of statistics and R was required. Course materials are available online.



The content was:

- Structure of high dimensional omics datasets.
- Hypothesis testing and inference for high dimensional data.
- Testing procedures for multiple testing (FWER, FDR).
- Leading example: detecting differentially expressed gene in gene expression experiments.
- Model based approaches and design of high

dimensional studies.

- Model formulation and estimation and visualization.
- Basic concepts of predictive models.
- Leading example: metabolic data and gene expression data.
- Principal component analysis (PCA).
- Data reduction using PCA.
- Supervised PCA (SPCA).
- Development of predictive models using supervise PCA.

- A case study in personalized medicine:
 - Survival time of cancer patients: development of a risk model using clinical variables.
 - Using metabolic data to predict survival time of cancer patients

The workshop was attended by 29 specialized professionals coming from Universidad de La Habana, Centro de Ingeniería Molecular, Centro de Ingeniería Genética y Biotecnología, Instituto Nacional de Oncología y Radiología, Centro de Inmuno-Ensayo, different institutions of the Ministry of Public Health, Universidad de Ciencias Informáticas, Universidad Tecnológica de La Habana and Instituto de Cibernética, Matemática y Física.

In 2020 will take place a second and more advanced course about analysis of high dimensional data.