

## EDUCATION

- 2013–2015      **Master's degree, Information Systems & Technology.**  
York University, Canada.
- *Courses:* Advanced Topics in Information Technology – Mining of Massive Datasets, Advanced Information Retrieval Systems, Introduction to Computational Linguistics, Software Product Lines, Research Methods in Information Technology.
- 2014–2015      **Data Science Specialization.**  
A non-credit series offered by Johns Hopkins University through Coursera.
- *Courses:* The Data Scientist's Toolbox, R Programming, Getting and Cleaning Data, Exploratory Data Analysis, Reproducible Research, Statistical Inference.
- 2011–2012      **Graduate Coursework, Mathematics.**  
University of Havana, Cuba.
- *Courses:* Multivariate Statistics, Nonparametric Tests – Methods Based on Ranks, Linear Models, Stochastic Simulation, Linear & Integer Programming, Heuristic & Metaheuristics Algorithms, Introduction to Parallel Computing.
- 2006–2011      **Bachelor's degree, Computer Science.**  
University of Havana, Cuba.
- *Grade Point Average:* 5.0/5.0 (Summa Cum Laude).
  - *Thesis:* Estimation of Distribution Algorithms Based on Copulas and Vines.
  - *Courses:* Algebra, Mathematical Analysis, Probability & Statistics, Discrete Mathematics, Theory of Programming Languages, Design & Analysis of Algorithms, Compiler Construction, Numerical Methods, Operating Systems, Database Systems, Software Engineering, Computer Networks, Artificial Intelligence, Information Retrieval Systems, among others.

**TECHNOLOGIES**      Python – R – C – MATLAB/Octave – Java – SQL – Hadoop – Git  
HTML – CSS – JavaScript – LaTeX – GNU/Linux system administration.

## EMPLOYMENT

- 2013–present      **Research & Teaching Assistant.**  
York University, Canada.
- Designed different solution methods for the problem of optimizing the user interaction in a configuration process.
  - Developed techniques to improve the performance of search heuristics on multimodal optimization problems.
  - Wrote scientific software in and MATLAB/Octave, R, and Python (using NumPy, pandas, and SciPy).
  - Acted as teaching assistant for the courses AP/ITEC 1620 Object-Based Programming (four sessions), AP/ITEC 2620 Introduction to Data Structures (one session), and AP/ITEC 1000 Introduction to Information Technologies (one session).

2011–2013

**Research Assistant.** Institute of Cybernetics, Mathematics and Physics, Cuba.

- Developed new estimation of distribution algorithms (EDAs) using copulas and vines to model the probability distributions.
- Wrote scientific software in MATLAB/Octave, a group of R packages available on CRAN, and a C library for dependence modeling using vines.
- Co-supervised a bachelor's thesis in Computer Science.

## SELECTED PUBLICATIONS

- Y. Gonzalez-Fernandez, M. Soto. (2014). copulaedas: An R Package for Estimation of Distribution Algorithms Based on Copulas. *Journal of Statistical Software*, 58(9), 1–34. <http://www.jstatsoft.org/v58/i09>.
- Y. Gonzalez-Fernandez, S. Chen. (2014). Identifying and Exploiting the Scale of a Search Space in Particle Swarm Optimization. In *Conference on Genetic and Evolutionary Computation*, 17–24. ACM. <http://doi.acm.org/10.1145/2576768.2598280>.
- Y. Gonzalez-Fernandez, D. Carrera, M. Soto, A. Ochoa. (2012). Vine Estimation of Distribution Algorithms. In *VIII Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados*, 1–7. [http://simd.albacete.org/maeb2012/papers/paper\\_99.pdf](http://simd.albacete.org/maeb2012/papers/paper_99.pdf).

For more information, please see <http://yassergonzalez.com/publications>.

## SELECTED OPEN-SOURCE SOFTWARE

- **configurator** – Python package providing different solutions to the problem of optimizing the user interaction in a configuration process. <https://github.com/yasserglez/configurator>.
- **copulaedas** – R package for implementing and studying estimation of distribution algorithms (EDAs) based on copulas. <https://github.com/yasserglez/copulaedas>.
- **vines** – R implementation of the vine graphical model for building high-dimensional probability distributions as a factorization of bivariate copulas and marginal density functions. <https://github.com/yasserglez/vines>.
- **ngram\_profile** – Python library for text classification based on character n-grams. [https://github.com/yasserglez/ngram\\_profile](https://github.com/yasserglez/ngram_profile).
- **dml** – C library for dependence modeling using C-vines, D-vines and R-vines. <https://github.com/yasserglez/dml>.

For more information, please see <http://yassergonzalez.com/software>.