

Juan Cruz Rodriguez

Education

- PhD in Computer Science:
“Análisis e integración de información de datos biológicos mediante análisis funcional”
FAMAF - National University of Córdoba (2014 - 2019)
- MSc in Applied Statistics
FCA, FCE and FAMAF - National University of Córdoba (2014 -)
- MSc in Computer Science
FAMAF - National University of Córdoba (2007 - 2012)
- BSc in Computer Science
FAMAF - National University of Córdoba (2007 - 2009)

Teaching Activities

- Teaching Assistant
FAMAF - National University of Córdoba (**May 2014 - Present**)
Algorithms and Data Structures
- Teaching Associate
Faculty of Engineering - Catholic University of Córdoba (2013 - 2014)
Programming in Python
- Student Assistant
FAMAF - National University of Córdoba (2011 - 2012)
Algorithms and Data Structures II & Databases

Industry Experience

- Data Scientist
Winclap (**February 2020 - Present**)
- Software Engineer
Applied Research (INVAP; *June 2013 - October 2013*)
C ++ / Qt
- QA Engineer
HPC Group at Intel Corporation (*June 2012 - June 2013*)
C, Perl, Python, Bash

R Packages

CRAN

- rco: The R Code Optimizer.
- autokeras: R Interface to ‘AutoKeras’.
- rflights: Query Plane Tickets using the ‘Kiwi’ API.

Bioconductor

- MIGSA: Massive and Integrative Gene Set Analysis.

GitHub

- shinyParallel: Run Shiny Applications in a Multi-Session Mode.
- shinyWYSIWYG: Shiny What You See Is What You Get (WYSIWYG) editor.
- interactingan: Interactive Presentation Ninja.
- heyshiny: New **shiny** input that translates audio to text.

Awards and Distinctions

- University Award
Diploma with Special Mention
National University of Córdoba to the second best average of 2011 graduates
- Substitute for First Escort
FAMAF - National University of Córdoba (2011)

Mentoring

- 2020 Google Summer of Code mentor w/R-project
Mentoring of student Rahul Saxena to work on the **rco** R package.
- 2019 Google Code-in mentor w/R-project
Mentored pre-university students with short tasks related to the **rco** R package.

Scholarships

- 2019 Google Summer of Code student w/R-project
Was awarded a GSoC project to develop the R Code Optimizer, **rco**, R package.
- Fulbright exchange visiting scholarship
At the University of Florida (2018)
- Doctoral Scholarship
National Scientific and Technical Research Council, Argentina (CONICET; 2013 - 2019)
- Master's Scholarship
Government of Córdoba, Argentina (2007 - 2011)

Publications

2019

- Rodriguez, J. C., Luraschi J.
Auto-Keras: An R easily accessible deep learning library.
- Rodriguez, J. C., Merino, G. A., Llera A. S., Fernández, E. A.
Massive integrative gene set analysis enables functional characterization of breast cancer subtypes. (**Journal**)

2018

- Rodriguez, J. C., Vargas Rojas C., Fernández, E. A.
ShinyWYSIWYG: a Shiny What You See Is What You Get editor.

2017

- Rodriguez, J. C., Prato L., Llera A. S., Fernández, E. A.
Effects of RNA-Seq data gene analysis methods, on the over-representation analysis of gene sets.

2016

- Rodriguez, J. C., González, G. A., Fresno, C., Llera, A. S., Fernández, E. A.
Improving Information Retrieval in Functional Analysis. **(Journal)**
- Rodriguez, J. C., Merino, G. A., Prato L., Llera A. S., Fernández, E. A.
The impact of RNA-Seq differential expression algorithms on Over-Representation Analysis of Gene Sets.

2015

- Rodriguez, J. C., González, G., Fresno, C., & Fernández, E. A.
Integrative Functional Analysis Improves Information Retrieval in Breast Cancer.
- Fresno C., González G. A., Merino G. A., Rodriguez J. C., Balzarini M., Fernández E. A.
DNA Microarrays Quality Control by ANOVA-PCA / PLS decomposition.

Research Exchange

- At the Ana Conesa Lab.
University of Florida, USA (*October 2018 - December 2018*)
- At the Genomics of Gene Expression group.
Centro de Investigación Príncipe Felipe, Valencia, Spain (*October 2017 - December 2017*)
DEANN project (Marie Curie IRSES, European Commission, 2013)