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)*

Industry Experience

- Head of Data / Data Science
  Good Tree ***(October 2020 - Present)***
- Lead Data Scientist
  Winclap *(February 2020 - November 2020)*
- Software Engineer
  Applied Research (INVAP; *June 2013 - October 2013*)
- QA Engineer
  HPC Group at Intel Corporation *(June 2012 - June 2013)*

Teaching Activities

- Teaching Assistant
  FAMAF - National University of Córdoba *(May 2014 - March 2021)*
  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

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

2021

- Rodriguez, J. C.
  The `{botmaker}`: automatically build R-based bots, the result of creating the @RStatsJobsBot Twitter bot.

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)