# Joaquin Menendez

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# **EDUCATION**

**Duke University, North Carolina, United States** 

Master in Interdisciplinary Data Science (MIDS) - Fulbright Scholarship | Aug 2018 - May 2020

University of Buenos Aires (UBA), Buenos Aires, Argentina | Mar 2009 - Nov 2014

Bachelor in Psychology

Teaching assistant positions:

- Neurophysiology | Jul 2011 Dec 2012
- Behavioral biology | Mar 2014 Jan 2015

Autonomous University of Madrid (UAM), Madrid, Spain - Santander Scholarship | Jan 2013 - Jul 2013 | International exchange student

## PROFESSIONAL EXPERIENCE

#### **Data Science Intern**

Duke Forge, Durham, United States | May 2019 - Aug 2019

- Examined the link between social determinants and risk prediction for hospital admissions, and which assessed whether social determinants affect that risk in a systematic way. [Link]
- Applied methods of machine learning, risk prediction, and assessment of classification bias.
- Programed an interactive dashboard using Plotly (Dash) in order to explore classification bias on different variables.
- Presented results to different stakeholders (researchers, physicians and hospital managers) and maintained dialogue to inform the direction of our analysis.

## Assistant Lecturer - 'Psychophysiological Methods'

University of Buenos Aires School of Psychology, Buenos Aires, Argentina Jul 2015 - Oct 2018

- Taught undergraduate courses in topics that included: Experimental design, Statistics, electroencephalography (EEG) and skin conductance Response (SCR).
- Prepared course material; including laboratory experiments, lectures and slides, and practice problems.
- Advised three undergraduate thesis.

#### **Research Assistant**

Behavioral Biology Lab (IByME-CONICET), Buenos Aires, Argentina | Sep 2015 - Aug 2018

- Investigated categorical learning using Electroencephalography registers (ERP) and behavioural data.
- Designed and programmed computerized experiments in Python.
- Implemented a protocol of Electroencephalographic data processing in MATLAB involved epoch rejection

and Independent Component Analysis (ICA).

- Used R and SPSS to perform inferential statistic analysis.

#### Research Intern

## Behavioral Biology Lab, IBYME-CONICET, Buenos Aires, Argentina | Aug 2014 - Sep 2015

- Research Project: "Neurophysiological correlates of direct and indirect semantic priming: verification procedures of behavioral processes".
- Assisted with experimental design, electroencephalographic and behavioral data collection, cleaning and analysis.

# SOFTWARE SKILLS

Programming Languages: Python, MATLAB Databases: MySQL, Neo4j, Hadoop, Spark

Statistics: R, SPSS

Frameworks: NumPy, SciPy, Pandas, Scikit-learn, dplyr, EEGLAB, MNE

Visualization: Tableau, Matplotlib, Seaborn, ggplot2, Plotly

Cloud Computing: AWS, Google Cloud

## SCIENTIFIC PUBLICATIONS

- Menendez, J., Sánchez, F., Polti, I., Idesis, S., Avellaneda, M., Tabullo, Á., & Iorio, A. (2018). Event-related potential correlates of stimulus equivalence classes: A study of task order of the equivalence based priming probes with respect to the stimulus equivalence tests, and among the distinct trial types with each other. Behavioural brain research, 347, 242-254. doi: 10.1016/j.bbr.2018.03.017
- Idesis, S. A., D'Amelio, T. A., Batán, S. T., Menendez, J., & Polti, I. (2018). Electrodermal and behavioral response to emotional Spanish words in native speakers. Revista Argentina de Ciencias del Comportamiento (RACC), 10(1), 43-54.
- Menendez, J., Sanchez, F.J., Avellaneda, M., Idesis, S.A., Iorio, A.A. (2017) Effects of Mixed Training Structures on Equivalence Class Formation. International Journal of Psychology and Psychological Therapy, 17(3), 291-303.
- Avellaneda, M., Menéndez, J., Santillán, M., Sánchez, F., Idesis, S., Papagna, V., & Iorio, A. (2016).
  Equivalence Class Formation is Influenced by Stimulus Contingency. The Psychological Record, 66(3), 477-487.

# **HONORS AND AWARDS**

#### Academic Mention 2017 | October 2018

Recognition given to lecturers who received an award from an external organization besides the University of Buenos Aires during the year 2017.

Argentine Presidential Fellowship in Science and Technology Administered by the Argentine Fulbright Commission with support from LASPAU  $\mid$  June 2017

Fellowship to pursue a master's degree in the United States starting Fall 2018. Funded by the Argentine

President's Cabinet and the U.S. Embassy of Buenos Aires.

**Prominent Student 2013** | *November 2014* Awarded by University of Buenos Aires in recognition of undergraduate research.

## National Interuniversity Council (CIN) Research Fellowship | August 2014

One year funded undergraduate research assistant position for an investigation group at University of Buenos Aires.

## UAM - Santander Scholarship | November 2013

Full scholarship to attend a semester at the Autonomous University of Madrid as an exchange student. Chosen as a recipient due to academic merit.

Google Scholar profile

Likedin profile