Rodrigo Leonardo

SENIOR UNDERGRADUATE

Guatemala City, Guatemala rodleonardoc@outlook.com

Website: rleonardo.com

LinkedIn: linkedin.com/in/rodleonardoc

(502)5769-9592

2016-2020

EDUCATION Universidad del Valle de Guatemala, Guatemala City

BSc, Applied Mathematics

GPA: 4.0 (Overall)

RESEARCH INTERESTS Machine Learning, Harmonic Analysis, Quantitative Finance

PUBLICATIONS

Leonardo, R., Hu, A., Uzair, M., Lu, Q., Fu, I., Nishiyama, K., Subrahmannian, S. M., Ravichandran, D. (2019). Fusing Visual and Textual Information to Determine Content Safety. To appear in the conference proceedings of the IEEE ICMLA 2019.

ACADEMIC PROJECTS

Researcher/Project Manager

IPAM, UCLA & GumGum Inc., Los Angeles, CA

Jun. 2019-Aug. 2019

Participant of Research in Industrial Projects for Students, a summer program jointly sponsored by the Institute for Pure and Applied Mathematics (IPAM) and GumGum Inc. Responsabilities include:

- Research and development of Computer Vision and Natural Language Processing algorithms centered around content safety classification.
- Design, development and integration of machine learning algorithms using a multimodal approach.
- Leading the team on the training and evaluation of the models produced.
- Presenting the research at both GumGum and IPAM.

Student

Park City Mathematics Institute (PCMI), Park City, UT

Jul. 2019

Participant of the Undergraduate Summer School at PCMI, an intensive three-week-long program of the Institute for Advanced Study, Princeton. Took part in two classes: Introduction to Harmonic Analysis and Oscillations in Harmonic Analysis. Member of the undergraduate research group led by Rafe Mazzeo, director of PCMI. Studied nodal domains and the Courant nodal domain theorem.

Chief Coordinator

First Annual Congress of Science Lectures, Guatemala City

Sep. 2018

15 Guatemalan scientists and more than 300 students participated on a series of eight lectures during September 20–21 at Universidad del Valle de Guatemala.

EXPERIENCE

Lecturer

Colegio Internacional Montessori, Guatemala City

Sep. 2019–Present

Teaching Math Honors and AP Calculus to a group of 20 high school seniors.

Teaching Assistant

Universidad del Valle de Guatemala, Guatemala City

Jan. 2017–Dec. 2018

For the following classes: Mathematical Logic, Ordinary Differential Equations, Multivariable Calculus, Elemental Geometry, Linear Algebra and Discrete Mathematics; a combined of more than 250 students.

Conference Talks & Posters

Fusing Visual and Textual Information to Determine Content Safety

Mathematical Association of America Undergraduate Poster Session,

Jan. 2020

Joint Mathematics Meetings, Denver, CO

American Mathematical Society Contributed Paper Session on Computer Science,

Jan. 2020

Joint Mathematics Meetings, Denver, CO

Advanced Machine Vision, IEEE International Conference on Machine Learning and Dec. 2019
Applications, Boca Raton, FL

Pretty pictures on n-dimensional doughnuts

Experimental Math Lab, Park City Mathematics Institute, Park City, UT

Jul. 2019

MOOCs	$Macroeconomic\ Accounts\ \mathcal{E}\ Analysis.$ International Monetary Fund	2018 – 19
	XSeries Program in Astrophysics. Australian National University	2018 – 19
	Paradox and Infinity. Massachusetts Institute of Technology	2018
	Finance for Everyone: Smart Tools for Decision-Making. University of Michigan	2018
	Ethical Leadership: Character, Civility and Community. Boston University	2016
	Introduction to Probability. Massachusetts Institute of Technology	2016
AWARDS & ACHIEVEMENTS	Among top 5 students regarding average score in the history of my faculty (54 years)	2016-19
	Seven times medallist nationwide in Guatemala (top 3)	2011-18
	At the <i>National Sciences Olympiad</i> , competing in the categories of Mathematics and Physics at college-level (3) and during high school (4).	
	Winner of the Francisco Nieves Medal	2017
	For the freshman with the best average score.	
	Selected to represent Guatemala at the <i>International Mathematical Olympiad</i> Couldn't participate due to lack of funding.	2013–15
SKILLS	Computer languages: Python, MATLAB, Java, RStudio, Mathematica, LATEX. Languages: Spanish–Mother tongue, English–C2, French–A2.	
Academic references	Dorval Carías—djcarias@uvg.edu.gt. Advisor and professor at <i>Universidad del Valle de Guatemala</i> . Nancy Zurita—nazurita@uvg.edu.gt. Director of the Department of Mathematics at <i>Universidad del Valle de Guatemala</i> .	
Personal references	Juan García— jagarciaporres1@gmail.com. Data Scientist at Central America Data. Marco Flores— nazurita@uvg.edu.gt. Junior trader at Universidad del Valle de Guatemala.	