

# Rodrigo Leonardo

SENIOR UNDERGRADUATE

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EDUCATION	<b>Universidad del Valle de Guatemala, Guatemala City</b> BSc, Applied Mathematics <b>GPA: 4.0</b> (Overall)	2016–2020
RESEARCH INTERESTS	Machine Learning, Harmonic Analysis, Quantitative Finance	
PUBLICATIONS	<b>Leonardo, R.</b> , Hu, A., Uzair, M., Lu, Q., Fu, I., Nishiyama, K., Subrahmannian, S. M., Ravichandran, D. (2019). <i>Fusing Visual and Textual Information to Determine Content Safety</i> . To appear in the conference proceedings of the IEEE ICMLA 2019.	
ACADEMIC PROJECTS	<b>Researcher/Project Manager</b> <i>IPAM, UCLA &amp; GumGum Inc., Los Angeles, CA</i> Jun. 2019–Aug. 2019 Participant of <i>Research in Industrial Projects for Students</i> , a summer program jointly sponsored by the <i>Institute for Pure and Applied Mathematics</i> (IPAM) and <i>GumGum Inc.</i> Responsibilities include: <ul style="list-style-type: none"><li>- Research and development of Computer Vision and Natural Language Processing algorithms centered around content safety classification.</li><li>- Design, development and integration of machine learning algorithms using a multimodal approach.</li><li>- Leading the team on the training and evaluation of the models produced.</li><li>- Presenting the research at both GumGum and IPAM.</li></ul> <b>Student</b> <i>Park City Mathematics Institute (PCMI), Park City, UT</i> 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.  <b>Chief Coordinator</b> <i>First Annual Congress of Science Lectures, Guatemala City</i> 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	<b>Lecturer</b> <i>Colegio Internacional Montessori, Guatemala City</i> Sep. 2019–Present Teaching Math Honors and AP Calculus to a group of 20 high school seniors.  <b>Teaching Assistant</b> <i>Universidad del Valle de Guatemala, Guatemala City</i> 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	<b>Fusing Visual and Textual Information to Determine Content Safety</b> 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 Applications, Boca Raton, FL Dec. 2019  <b>Pretty pictures on <math>n</math>-dimensional doughnuts</b> Experimental Math Lab, Park City Mathematics Institute, Park City, UT Jul. 2018	

MOOCs	<i>Macroeconomic Accounts &amp; Analysis</i> . International Monetary Fund	2018–19
	<i>XSeries Program in Astrophysics</i> . Australian National University	2018–19
	<i>Paradox and Infinity</i> . Massachusetts Institute of Technology	2018
	<i>Finance for Everyone: Smart Tools for Decision-Making</i> . University of Michigan	2018
	<i>Ethical Leadership: Character, Civility and Community</i> . Boston University	2016
	<i>Introduction to Probability</i> . 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 <i>Francisco Nieves Medal</i> For the freshman with the best average score.	2017
	Selected to represent Guatemala at the <i>International Mathematical Olympiad</i> Couldn't participate due to lack of funding.	2013–15
SKILLS	<b>Computer languages:</b> Python, MATLAB, Java, RStudio, Mathematica, L <sup>A</sup> T <sub>E</sub> X. <b>Languages:</b> Spanish–Mother tongue, English–C2, French–A2.	
ACADEMIC REFERENCES	<b>Dorval Carías</b> – djcarias@uvg.edu.gt. Advisor and professor at <i>Universidad del Valle de Guatemala</i> . <b>Nancy Zurita</b> – nazurita@uvg.edu.gt. Director of the Department of Mathematics at <i>Universidad del Valle de Guatemala</i> .	
PERSONAL REFERENCES	<b>Juan García</b> – jagarciaporres1@gmail.com. Data Scientist at <i>Central America Data</i> . <b>Marco Flores</b> – maflodi@gmail.com. Junior trader at <i>Future Capital LLC</i> .	