

Pedro Sandoval Segura

CONTACT INFORMATION	3116 Brendan Iribe Center 8125 Paint Branch Drive College Park, MD 20742	(301) 405 2662 psando@cs.umd.edu http://cs.umd.edu/~psando
RESEARCH INTERESTS	I am broadly interested in computer vision and deep learning. Lately, my research focuses on adversarial examples and the benefits of adversarial training.	
EDUCATION	University of Maryland , College Park, MD Ph.D., Computer Science <i>Amazon Lab126 Diversity in Robotics and AI Fellow</i> M.S., Computer Science	Expected 2025 May 2021
	Harvey Mudd College , Claremont, CA B.S., Computer Science and Mathematics <i>Graduated with High Distinction</i>	May 2019
RESEARCH EXPERIENCE	Amazon Lab126 , Sunnyvale, CA <i>Applied Scientist Intern</i> <ul style="list-style-type: none">Working with Dr. Chi Liu and Dr. Albert Chen Computer Vision Laboratory , University of Maryland <ul style="list-style-type: none">Studying adversarial robustness in the context of image classification and segmentationWorking with Prof. David Jacobs and Prof. Tom Goldstein U.S. Naval Research Laboratory , Washington, D.C. <ul style="list-style-type: none">Investigating adversarial examples, robustness, and interpretability in meta-learning approaches for few-shot learningSubmitted findings to 5th Workshop on Meta-Learning at NeurIPS 2021Working with Dr. Ed Lawson	May 2022 - Present Aug 2020 - Present Summer 2021
INDUSTRY EXPERIENCE	Facebook, Inc. , Seattle, WA <i>Software Engineering Intern</i> <ul style="list-style-type: none">Implemented and monitored new share flow functionality for encrypted Messenger threads, allowing users to forward text, sticker, photo, audio, and video securelyReceived a full-time offer at the conclusion of internship Facebook, Inc. , Menlo Park, CA <i>Software Engineering Intern</i> <ul style="list-style-type: none">Designed and built a new Messenger Groups Tab approvals surface, enabling users to accept join requests across multiple group threadsOversaw, implemented, and ran an A/B test interleaving active groups in the Active Tab which drove topline metrics such as group sends and group creates Facebook, Inc. , Menlo Park, CA <i>Facebook University for Engineering Intern</i> <ul style="list-style-type: none">Organized engineering tasks, drafted feature ideas, and collaborated with a team of 3 to build InSync, an iOS app which synchronizes music on multiple devices	Summer 2018 Summer 2017 Summer 2016

TEACHING EXPERIENCE	CMSC421: Introduction to Artificial Intelligence Graduate Teaching Assistant, University of Maryland	Spring 2021
	CMSC421: Introduction to Artificial Intelligence Graduate Teaching Assistant, University of Maryland	Fall 2020
	CMSC436: Programming Handheld Systems Graduate Teaching Assistant, University of Maryland	Fall 2019
	CS81: Computability and Logic Teaching Assistant, Harvey Mudd College	Spring 2019
	MATH187: Operations Research Grader, Harvey Mudd College	Spring 2019
HONORS AND AWARDS	Amazon Lab126 Diversity in Robotics and AI Fellow	2021 - 2022
	Google CS Research Mentorship Program (CSRMP)	2021
	Richard Tapia Conference Scholarship	2020
	CRA-WP Grad Cohort for URMD	2020
	UMD International Conference Student Support Award	2020
	UMD Dean's Fellowship Program	2019 - 2020
	ARCS Scholarship, Los Angeles Chapter	2016 - 2019
PUBLICATIONS	Students Rising Above Scholarship	2015 - 2019
	6. Sandoval-Segura , Singla, Geiping, Goldblum, Goldstein, Jacobs. "Autoregressive Perturbations for Data Poisoning". <i>In Review</i> , 2022	
	5. Sandoval-Segura , Singla, Fowl, Geiping, Goldblum, Jacobs, Goldstein. "Poisons that are learned faster are more effective". In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2022.	
	4. Bashir, Montañez, Sehra, Sandoval-Segura , Lauw. "An Information-Theoretic Perspective on Overfitting and Underfitting". In <i>Australasian Joint Conference on Artificial Intelligence (AJCAI)</i> , 2020.	
	3. Sandoval-Segura , Lauw, Bashir, Shah, Sehra, Macias, Montañez. "The Labeling Distribution Matrix (LDM): A Tool for Estimating Machine Learning Algorithm Capacity". <i>12th International Conference on Agents and Artificial Intelligence (ICAART)</i> , 2020. arXiv:1912.10597	
	2. Drissi, Sandoval , Ojha, Medero. "Harvey Mudd College at SemEval-2019 Task 4: The Clint-Buchanan Hyperpartisan News Detector". In <i>Proceedings of The 13th International Workshop on Semantic Evaluation (SemEval)</i> , 2019. arXiv:1905.01962	
	1. Drissi, Watkins, Khant, Ojha, Sandoval , Segev, Weiner, Keller. "Programming Language Translation using a Grammar-Driven Tree-to-Tree Model". <i>ICML Workshop on Neural Abstract Machines and Program Induction v2 (NAMPI)</i> , 2018. arXiv:1807.01784	
LEADERSHIP AND OUTREACH	Reviewer for 1st International Conference on Automated ML	Spring 2022
	Reviewer for 5th Workshop on Meta-Learning at NeurIPS	Fall 2021
	CS Department M.S. and Ph.D. Admissions Committee	Spring 2020
	UMD Graduate Student Government Representative	Fall 2019
	JumpStart Computing Workshop, Iribe Initiative for Inclusion & Diversity in Computing	Fall 2019

TECHNICAL
BACKGROUND

Languages: Python, Java, C, C++, Objective-C, Swift, Go, Haskell, AMPL, Arduino

Software: PyTorch, Git, GitHub, Mercurial, Jira, Mathematica, MATLAB, Xcode

PERSONAL
INFORMATION

Citizenship: United States

Language: English, Spanish