Pedro Sandoval Segura

CONTACT
INFORMATION

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RESEARCH
INTERESTS

I am broadly interested in problems within computer vision and deep learning. Lately, my research focuses on how to craft adversarial examples with high rates of cross-task transferability.

EDUCATION

University of Maryland, College Park, MD
  M.S., Computer Science   Expected May 2021
  Ph.D., Computer Science   Expected May 2024

Harvey Mudd College, Claremont, CA
  B.S., Computer Science and Mathematics   May 2019
  Graduated with High Distinction

RESEARCH
EXPERIENCE

Computer Vision Lab, University of Maryland   Aug 2020 - Present
Working with Prof. David Jacobs
- Studying a variety of adversarial attacks for computer vision tasks

Institute for Systems Research, University of Maryland   Aug 2019 - Aug 2020
Graduate Research Assistant I
Working with Prof. Dana Nau and Prof. William Regli
- Investigated algorithms for heterogeneous team formation and temporal planning
- Authored a publication for future submission

AMISTAD Lab, Harvey Mudd College   Jan 2019 - May 2019
Working with Prof. George Montañez
- Studied notions of algorithm capacity and dataset complexity
- Published findings in ICAART 2020

Neural Networks Group, Harvey Mudd College   Aug 2017 - May 2018
Working with Prof. Robert Keller
- Explored programming language translation using a tree-to-tree model
- Published findings in an ICML workshop

INDUSTRY
EXPERIENCE

Facebook, Inc.   Summer 2018
Software Engineering Intern, Project LightSpeed
- Implemented and monitored new share flow functionality for encrypted Messenger threads, allowing users to forward text, sticker, photo, audio, and video securely
- Received a full-time offer at the conclusion of internship

Facebook, Inc.   Summer 2017
Software Engineering Intern, Messenger Groups
- Designed and built MVVM architecture for a new Groups Tab approvals surface, enabling users to accept join requests across multiple group threads
- Oversaw, 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.	Summer 2016

Facebook, Inc.   Summer 2016
Facebook University for Engineering Intern
- 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

TEACHING EXPERIENCE		

TEACHING EXPERIENCE

CMSC421: Introduction to Artificial Intelligence   Fall 2020
Graduate Teaching Assistant, University of Maryland

CMSC436: Programming Handheld Systems   Fall 2019
Graduate Teaching Assistant, University of Maryland

CS81: Computability and Logic   Spring 2019
Teaching Assistant, Harvey Mudd College

MATH187: Operations Research   Spring 2019
Grader, Harvey Mudd College

HONORS AND AWARDS

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
Students Rising Above Scholarship	2015 - 2019

PUBLICATIONS

3. **Sandoval Segura**, Lauw, Bashir, Shah, Sehra, Macias, Montañez. "The Labeling Distribution Matrix (LDM): A Tool for Estimating Machine Learning Algorithm Capacity". *12th International Conference on Agents and Artificial Intelligence (ICAART)*, 2020. arXiv:1912.10597

2. Drissi, **Sandoval**, Ojha, Medero. "Harvey Mudd College at SemEval-2019 Task 4: The Clint-Buchanan Hyperpartisan News Detector". In *Proceedings of The 13th International Workshop on Semantic Evaluation (SemEval)*, 2019. arXiv:1905.01962

1. Drissi, Watkins, Khant, Ojha, **Sandoval**, Segev, Weiner, Keller. "Programming Language Translation using a Grammar-Driven Tree-to-Tree Model". *ICML Workshop on Neural Abstract Machines and Program Induction v2 (NAMPI)*, 2018. arXiv:1807.01784

LEADERSHIP AND OUTREACH

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

PERSONAL INFORMATION

Citizenship: United States
Language: English, Spanish