

Rodolfo Corona Rodriguez

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Education

University of California Berkeley

PhD in Computer Science

Berkeley, CA
July 2019 - Present

University of Amsterdam

Fulbright Student Research Grant

Amsterdam, Netherlands
June 2018 - June 2019

University of Texas at Austin

B.S., Computer Science
Turing Scholar, McNair Scholar

Austin, TX
May 2018

GPA: 3.84

Honors Thesis: *An Analysis of Using Semantic Parsing for Speech Recognition*

Relevant Coursework: Advanced Geometry Processing (G), Natural Language Processing (G), Robot Learning from Demonstration (G), Artificial Intelligence (H), Introduction to Computer Science Research (H), Undergraduate Reading and Research, Algorithms and Complexity (H), Programming Languages (H), Theory of Computation, Linear Algebra and Matrix Theory, Probability I

G denotes graduate course, H denotes honors course

Cornell, Maryland, Max Planck

Pre-doctoral Research School

Held at Max Planck Institute for Software Systems

Summer school on a variety of topics within computer science research.

Saarbrücken, Germany
August 8 - 13, 2017

Jelinek Memorial Summer School

Held at Carnegie Mellon University

Two week summer school for topics in language technologies and machine learning. Part of the Jelinek Memorial Summer Workshop.

Pittsburgh, PA

June 18 - 30, 2017

Interests

Representation Learning, Multimodal Machine Learning, Natural Language Processing, Computer Vision, Language Grounding, Robotics, Interpretable Machine Learning.

Publications

[1] Lin, A.S, Wu, L., **Corona, R.**, Tai, K., Huang, Q., and Mooney, R.J., “Generating Animated Videos of Human Activities from Natural Language Descriptions,” Proceedings of the NeurIPS Workshop on Visually Grounded Interaction and Language (ViGIL), Montreal, Quebec, Dec. 2018.

[2] **Corona, R.**, Thomason, J., and Mooney, R.J., “Improving Black-box Speech Recognition using Semantic Parsing.” *8th International Joint Conference on Natural Language Processing (IJCNLP)*, Taipei, Taiwan, Nov. 2017.

Research
Experience

University of California Berkeley Berkeley, California
Advised by Trevor Darrell and Dan Klein July 2019 - Present
Working on embodied cognition and instruction following. Also exploring applications of theory of mind within explainable artificial intelligence (XAI) domains.

University of Amsterdam Amsterdam, Netherlands
Advised by Zeynep Akata Summer 2018 - Spring 2019
Research in XAI, particularly in the area of multiagent systems at the intersection between computer vision and NLP.

University of Texas at Austin Austin, TX
Advised by Raymond J. Mooney Fall 2015 - Spring 2018
Collected speech dataset, annotated with transcripts and semantic forms, and researched use for semantic parsing in speech recognition. Also worked on projects at intersection between NLP and robotics, as well as NLP and computer graphics.

University of Texas at Austin Austin, TX
Advised by Qixing Huang Fall 2016 - Spring 2018
Augmented motion capture dataset with natural language descriptions through crowdsourcing. Worked on using deep learning techniques for generating 3D animations of human motion given natural language descriptions.

University of Massachusetts Amherst, REU Intern Amherst, MA
Advised by Joydeep Biswas Summer 2016
Implemented a particle filter for localization of an outdoor robot using wheel odometry and GPS sensors. Collected dataset of robot sensor readings to test particle filter. Inquired into methods for performing outdoor visual localization.

Research
Presentations

IJCNLP 2017 Taipei, Taiwan
Poster presentation Nov. 27 - Dec. 2, 2017
Title: Improving Black-box Speech Recognition
Using Semantic Parsing

2017 Gulf Coast Undergraduate Research Symposium Rice University
10-minute Oral Presentation Houston, TX
Title: Improving Black-box Speech Recognition November 4, 2017
Using Semantic Parsing
Outstanding Presentation Award

2017 SACNAS Conference Salt Lake City, UT
Poster Presentation October 19 - 21, 2017
Title: Improving Black-box Speech Recognition
Using Semantic Parsing
Presenter Award in Computer & Information Sciences

19th Annual Texas National McNair Research Conference Denton, TX
10-minute oral presentation February 16-19, 2017
Title: An Analysis of Using Semantic Parsing for
Speech Recognition

Honors	Berkeley Chancellor's Fellowship	Fall 2019
	UT Austin College of Natural Sciences Research Excellence Award	Spring 2018
	NAACL Scholarship for Jelinek Memorial Summer School	Summer 2017
	UT Austin College of Natural Sciences Book Award for Academic Excellence	Spring 2016
	Tracor/Frank McBee, Jr. Scholarship	2015 - 2016 Academic Year
Activities	Coding in the Classroom	2017 - 2018 Academic Year
	<i>Helped teach elementary school kids to program Lego Mindstorm robots.</i>	
	RoboCup@Home 2017	Summer 2017
	<i>Worked on natural language processing components for UT Austin Villa team.</i>	
	Team won 3rd Place	
	EMNLP 2016	November 2016
	<i>Student Volunteer</i>	
	Undergraduate Research Journal	2015 - 2016 Academic Year
	<i>Natural Sciences Assistant Editor</i>	
	Theatre for Dialogue	2014 - 2015 Academic Year
	<i>Interactive theatre for educating UT students about interpersonal and relationship violence.</i>	
	Project M.A.L.E.S.	Fall 2014
	<i>Mentored at-risk high school students in the Austin area for college-readiness.</i>	