

ISABEL CACHOLA

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EDUCATION

The University of Texas at Austin
Bachelor of Science in Applied Mathematics
Elements of Computing Certificate - Minor in Computer Science

May 2019
GPA: 3.6

EXPERIENCE

Data Science Intern - CDK Global Summer 2018

- Created a machine learning model to predict the probability that a vehicle will be sold within 35 days, providing dealerships with additional negotiating power in sales
- Implemented model on AWS using Data Pipeline, S3, Athena, and EC2
- Built a web app in Flask for user-friendly data visualizations and business insights
- Presented the business value and technical design of my project in a tech talk to 25 engineers

Robotathon Head - Robotics and Automation Society Fall 2017

- Headed a semester long robotics competition with 150 beginner level participants and coordinated learning opportunities for students to gain a technical foundation in robotics
- Organized the largest event in the organization's history, an interactive technical conference with about 200 attendees, including participants, mentors, and leaders
- Delegated tasks to 30 mentors to ensure a high quality experience for participants and produced a record number of teams carrying through to the final competition

News Headline Generator Twitter Bot Spring 2017

- Built a Twitter Bot to generate and output news headlines using a Hidden Markov Model
- Implemented model in Python and collected data using the Twitter API

Research Assistant - Howison Labs Spring 2017

- Collected data on NSF funded software projects with the end goal of understanding how software created in academia successfully transition into an open source platform

Directed Reading Program Spring 2017

- Conducted an independent study under the mentorship of math graduate student in natural language processing
- Presented study findings and project in machine translation to other undergraduate and graduate math students

PUBLICATIONS

Why Swear? Analyzing and Inferring the Intentions of Vulgar Expressions November 2018

Eric Holgate, **Isabel Cachola**, Daniel Preotiuc-Pietro and Junyi Jessy Li.

Proceedings of 2018 Conference on Empirical Methods in Natural Language Processing

- Introduced a new NLP classification task and developed a novel modeling technique that achieves state-of-the-art performance in hate speech detection on a benchmark data set

Expressively vulgar: The socio-dynamics of vulgarity and its effects on sentiment analysis in social media (Area Chair Favorite) August 2018

Isabel Cachola, Eric Holgate, Daniel Preotiuc-Pietro and Junyi Jessy Li.

Proceedings of the 27th International Conference on Computational Linguistics, pages 2927-2938.

- Presented research at the Conference on Computational Linguistics 2018 to 60 academics and industry professionals
- Conducted a large-scale, data driven empirical analysis of vulgar word usage on social media and developed a novel neural modeling technique that improves sentiment prediction

AWARDS

Undergraduate Research Fellowship Spring 2018

- Wrote a proposal to communicate value of research project and received maximum funding

Intellectual Entrepreneurship Citizen Scholar Research Contest Spring 2018

- Presented research and won scholarship in competition with other undergraduate researchers

SKILLS

Technical: Proficient in Python, R, Linux, Git; Exposure to Cloud Computing (AWS), SQL
Experienced with common Python libraries (e.g. Pandas, Numpy, Keras, Scikit-learn, Scipy, NLTK)

Language: Proficient in Spanish