

Diego A. Raygoza-Castanos

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Work Experience

Microsoft Corporation

Aug. 2022 – Present

Software Engineer

Redmond, WA, USA

Palo Alto Networks, Inc.

June 2021 – Aug. 2021

Machine Learning Software Engineer Intern, Forecasting

Santa Clara, CA, USA

- Built a TimeGAN-based synthetic time-series data generator for anomaly detection.
- Created a programming interface wrapper to generate synthetic data based on real data or desired distribution.

MIT CSAIL, Jaakkola Lab

Nov. 2021 – June 2022

Molecular Generation via Keypoints

Cambridge, MA, USA

- Led experiments verifying that keypoint creation used in EquiBind finds binding regions in PDBBind and SBDD-3D datasets.

Projects

Metropolis-Hastings Algorithm for Multiple Ciphers

April 2022

- Created Metropolis-Hastings based algorithm to decode text with multiple ciphers.
- Algorithm outperformed half of the submitted algorithms in both runtime and correctness.

Robustness of Random Forests on Multimodal ADNI Data

Oct. 2021 – Dec. 2021

- Tested the robustness of random forest (RF) classifiers on different modalities of the ADNI dataset.
- Verified how adversarial training improved the robustness of RF classifier across modalities.

Language Bias in Fake News Detection

Oct. 2021 – Dec. 2021

- Measured the bias of LSTM and Transformer-based models towards English in comparison to Japanese and Kurdish in fake news classification.
- Identified tokens most responsible for the classification of fake news with gradient-based saliency methods.

Education

Massachusetts Institute of Technology

Sept. 2018 – May 2022

Bachelor of Science in Electrical Engineering and Computer Science, Mathematics

Cambridge, MA, USA

Minor in Statistics and Data Science, Philosophy

GPA: 4.8/5.0

Skills

Programming Languages: Python (Proficient), Kusto (Intermediate), C/C++ SQL (Beginner)

Libraries: AzureOpenAI, OpenAI, PyTorch, Tensorflow, Keras, NumPy, Scikit-Learn Pandas

Programming Environments: Jupyter, Conda, Arduino

Other: Git, Scrum, Unix, AzureML, Google Cloud Platform (Vertex AI), Amazon Web Services (SageMaker), Blender, Meshlab

Languages: English, Spanish (Fluent); Portuguese (Beginner)