Diego A. Raygoza-Castanos

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Work Experience

Microsoft Corporation Aug. 2022 – Present
Software Engineer *Redmond, WA, USA*
- Co-led service health test automation, catching production issues weeks before release.
- Co-led customer-facing re-architecture, decreasing update time from months to weeks.
- Raised and maintained high levels of SLA faithfulness.

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 to generate synthetic time series data.

MIT CSAIL, Jaakkola Lab Nov. 2021 – June 2022
Molecular Generation via Keypoints *Cambridge, MA, USA*
- Created a pipeline comparing Equibind created keypoints creation and 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
- Automated robustness testing of random forest (RF) classifiers on different ADNI dataset modalities.
- 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)