

Frank Palma Gomez

<https://www.knarfamlap.github.io>

Email : frankpalma12@gmail.com

EDUCATION

- **Boston University** Boston, MA
Ph.D in Computer Science 2023 - Present
- **CUNY Queens College** Queens, NY
B.A. Computer Science / Minor in Mathematics / Cum Laude 2018 - 2022
- **Relevant Coursework:** Machine Learning, Natural Language Processing, Data Structures and Algorithms, Probability and Statistics, Bayesian Statistics, Linear Algebra, Discrete Mathematics, Calculus.

PUBLICATIONS

- **A Low-Resource Approach to the Grammatical Error Correction of Ukrainian**
Frank Palma Gomez, Alla Rozovskaya, and Dan Roth. *UNLP Workshop at EACL 2023*
- **Using Neural Machine Translation for Generating Diverse Challenging Exercises for Language Learners**
Frank Palma Gomez, Subhadarshi Panda, Michael Flor, and Alla Rozovskaya. *ACL 2023*.
- **Automatic Generation of Distractors for Fill-in-the-Blank Exercises with Round-Trip Neural Machine Translation**
Subhadarshi Panda, Frank Palma Gomez, Michael Flor, and Alla Rozovskaya.
Proceedings of the ACL Student Workshop 2022
- **Societies Within Peace Systems Avoid War and Build Positive Inter-group Relationships**
Douglas P. Fry, Geneviève Souillac, Larry Liebovitch, Peter T. Coleman, Kane Agan, Elliot Nicholson-Cox, Dani Mason, Frank Palma Gomez and Susie Strauss.
Humanities and Social Sciences Communications 2021

EXPERIENCE

- **Google** Mountain View, CA
Student Researcher Sept 2022 - Present
 - Developed explanation systems for grammatical error correction using language models (e.g T5, PaLM, etc.) and devising synthetic data generation processes. Hosted by Shankar Kumar.
 - Trained multi-modal retrieval systems with capabilities of retrieving speech transcriptions and written and spoken translations at a large scale. Hosted by Gustavo Hernandez Abrego, Daniel Cer, and Yun-Hsuan Sung.
- **Santa Fe Institute Undergraduate Complexity Research** Santa Fe, NM
Researcher Jun 2021 - Aug 2021
 - Designed unsupervised approach for sarcasm generation by leveraging large **language models** and **knowledge graphs**. Advised by Tyler Millhouse and Melanie Mitchel.
- **Queens College NLP Research** Queens, NY
Researcher Sept 2020 - Present
 - Developed a novel approach for automatically generating distractors for cloze exercises found in English Second Language (ESL) standardized tests using **Round Trip Neural Machine Translation**. Advised by Alla Rozovskaya
- **Queens College Anthropological Research** Queens, NY
Researcher Sept 2019 - Sept 2020
 - Applied machine learning techniques to explore characteristics promoting peacefulness within nations. Implemented modeling and statistical test to demonstrate significance in degree of peacefulness within nations. Advised by Larry S. Liebovitch.

PROGRAMMING SKILLS

- **Languages:** Java, Python, C/C++, Javascript, Dart, R
- **Technologies and Libraries:** Flutter, Firebase, Node.js, PyTorch, Tensorflow, Scikit-learn, Numpy, Linux, AWS, \LaTeX