Frank Palma Gomez

Email : frankpalma12@gmail.com

https://www.knarfamlap.github.io

EDUCATION

- **CUNY Queens College** — Queens, NY
  B.A. Computer Science / Minor in Mathematics / Cum Laude — *Completed on 05/2022*
- **Relevant Coursework:** Machine Learning, Natural Language Processing, Data Structures and Algorithms, Probability and Statistics, Bayesian Statistics, Linear Algebra, Discrete Mathematics, Calculus.

PUBLICATIONS

- **Generating Grammatical Error Correction Confusion Sets with Round Trip Neural Machine Translation**
  Frank Palma Gomez and Alla Rozovskaya. *Working Progress.*

- **Using Neural Machine Translation for Generating Diverse Challenging Exercises for Language Learners**
  Frank Palma Gomez, Subhadarshi Panda, Michael Flor, and Alla Rozovskaya. *Under Review.*

- **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** — New York, NY
  Student Researcher — *Sept 2022 - Present*
  - Developing automatic feedback generation models for language learners using language models (e.g T5, PaLM, etc.) and devicing synthetic data generation precesses. Mentored by Shankar Kumar.

- **Santa Fe Institute Undergraduate Complexity Research** — Santa Fe, NM
  Researcher — *June 2021 - Aug 2021*
  - Designed unsupervised approach for sarcasm generation by leveraging **language models** (SBERT) and **commonsense knowledge graphs** (COMET). Mentored by Tyler Millhouse and Melanie Mitchel.

- **Queens College Natural Language Processing Research** — Queens, NY
  Researcher — *Sept 2020 - Present*
  - Developed and implemented a novel method 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 while enrolled in CS84000 at the **CUNY Graduate Center**.

- **Mozilla Builders Incubator** — New York, NY
  Software Engineer — *May 2020 - Aug 2020*
  - Developed Jamii, a match making app that allows you to chat with people your friends match you with. Work done with **Mozilla's Builders Incubator**, selective incubator aimed for web technologies and apps.
  - Designed and implemented Jamii's chat and matching features using **Flutter** and **Firebase** in under **3 months**.

- **Queens College Anthropological Research** — Queens, NY
  Researcher — *Sep 2019 - Sep 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.
  - Mentored 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