Frank Palma Gomez
Mobile : +1 (516) 451-9650
http://www.knarfamlap.github.io
Email : frankpalma12@gmail.com

Education

- **CUNY Queens College** — Queens, NY
  Bachelor of Science in Computer Science and Mathematics — *Expected Graduation: May 2022*

Publications

- **Fry, Souillac, Liebovitch, Coleman, et al., 2021**: Societies within peace systems avoid war and build positive intergroup relationships. *Humanities and Social Sciences Communications 2021*

Experience

- **Grammatical Error Correction Research** — Queens, NY
  Research Assistant — *Sept 2020 - Present*
  - **Description**: Worked under the supervision of Professor Alla Rozovskaya to research methods in which grammatical error correction systems can benefit from synthetic data.
- **Mozilla Builders Incubator** — New York, NY
  Participant — *May 2020 - Aug 2020*
  - **Description**: Incubator that aims to ship a minimum viable product with the help of mentors.
  - **Product**: Developed Jammi. Jamii allows you and your friends to match each other with people they personally believe that you'd get along with - whether that be romantically or platonically. Mentored by Bijan Marashi.
  - **Developer**: Develop and design app for use in production using Flutter, Firebase, Python, and Javascript. Jamii is currently under beta development.
- **Sustainable Peace Project** — Queens, NY
  Research Assistant — *Sep 2019 - Present*
  - **Research Assistant**: Machine learning analysis of ethnographic anthropological data. Applied machine learning techniques in order to research characteristics that allow nations to be peaceful.
  - **Technologies**: Developed a stronger understanding of machine learning, statistical techniques while using tools such as Python, Scikit-Learn, Matplotlib, and Pandas.
  - **Mentorship**: Mentored by Dr. Larry S. Liebovitch to frame the problem and to ensure accurate integration of algorithms and understanding of data.
- **New Visions for Public Schools** — New York, NY
  Software Engineer Intern — *May 2019 - Aug 2019*
  - **nvSwapper**: Developed nvSwapper, a chrome extension that allows users to swap between working environments within a few clicks. Gained proficiency in Javascript, Nodejs, and multiple Web APIs.
  - **Developer**: Worked alongside a team of Full Stack Software Engineers to design the web tools.
- **ReSolve** — Queens, NY
  Club President — *Jan 2019 - Present*
  - **Description**: Hosted technical workshops for student to teach and learn technical skills. Workshops range from topics including Machine Learning, Web Development, and Mathematics
- **Google Computer Science Summer Institute Extension** — Queens, NY
  Program Participant — *Jul 2018 - Aug 1018*
  - **Program Participant**: Intensive 3-week programming institute taught by Google engineers. Learned how to develop web applications using various programming languages.
  - **Technologies**: Gained proficiency in Python, HTML, CSS, Google App Engine and the Bootstrap library; strengthened my core understanding of Javascript.
  - **Shpiel**: Social platform where users can discuss and share their ideas with the public through the use of specific categories that describes their topic of interest. Programmed the backend of Shpiel with Python, Jinja2, and Appengine. Developed the frontend with Javascript, HTML, and the Bootstrap library.

- **Computational Design and Innovation: The Makerspace** New York, NY
  Program Participant/Programmer *Jul 2017 - Aug 2017*
  - **Program Participant - Programmer**: Worked alongside Electrical and Mechanical engineers from The Cooper Union Albert Nerken School of Engineering where we prototype a solution that would aid the visually impaired by facilitating the way they walk to their destinations. Developed Eye 2020
  - **Eye 2020**: Programmed a device that enables a visually impaired user to know if there is an obstacle in their vicinity. Used C++ to facilitate communication among the Arduino, four Ultrasonic Sensors, and a speaker. The speaker outputs a beep whose frequency increases as the user approaches an object in front of them.

Projects

- **Twitter ChatBot**: Developed a ChatBot that answers questions from multiple subjects. The Bot must be linked to a Twitter account. When another Twitter account tweets a question to the ChatBot, the ChatBot responds by using the Wolfram Alpha API and the Twitter API.
- **Machine Learning With Python and C++**: Implemented classic machine learning algorithms from scratch using Python and C++. Algorithms include Logistic Regression, Linear Regression, GDA, Naive Bayes, SVM, and Decision Trees. Implementations use Numpy and Eigen as only dependencies.
- **MyGrad**: Automatic differentiation library implemented from scratch using Python. Built small neural network library that implements layers (Linear, RNN, LSTM, and MLP) using mygrad to compute gradients.
- **Tweet2Emoji**: Tweet2Emoji is a emoji classifier. It takes your tweets and assigns an appropriate emoji. Given the text of a tweet, the machine learning model can predict the most likely associated emoji's. Uses a convolutional neural network with GloVE embeddings.

Programming Skills

- **Languages**: Java, Python, C/C++, Javascript, Dart, R