

SKILLS

- **Languages:** Python, R, SQL, SAS, Excel/VBA
- **Associated Libraries:** pandas, numpy, scikit-learn, Keras, matplotlib, dplyr, caret, flask

EXPERIENCE

- **Strata Decision Technology** Chicago, IL
Data Science Intern May 2019 - Aug. 2019
 - Wrote SQL queries gathering hospital encounter data from across 30 national health systems, and cleaned the raw data for further analysis.
 - Employed text classification models to classify job categories from raw payroll data to gauge wage differences between different hospitals.
 - Presented an analysis detailing differences in costs between pediatric and general hospitals for appendectomy procedures.
- **Long Beach Transit** Long Beach, CA
Risk & Safety Intern Dec. 2017 - May 2019
 - Created the quarterly KPI for the risk department recapping bus accident trends and statistics, which were presented to the executive leadership.
 - Implemented Excel VBA applications to automate and streamline various accident related reports for future ease and use.
 - Participated and assisted in company wide safety bus accident prevention and safety campaigns based on accident trends.
- **CSU Long Beach Math Department** Long Beach, CA
Student Assistant Dec. 2018 - May 2019
 - Develop Python program to simulate random class schedules and observe whether proposed math schedules will meet the demand for all students needing to take math classes.

PROJECTS

- **Identification of Risk Factors and Likelihood of Benefit from Chemotherapy (Thesis)**
 - Utilized high dimensional gene expression and survival data from lung cancer patients to create a clinical support classifier using Cox regression models identifying those patients that are likely to benefit from chemotherapy.
- **Recipe Matcher - [recipefinder.pythonanywhere.com](https://github.com/alexnguyen9/recipefinder)**
 - Parsed through recipe text data to convert recipes into a bag of words model.
 - Implemented a recommender system to find similar ingredients based on an inputted list of ingredients.
- **ARAM Match Predictor - [arampredict.pythonanywhere.com](https://github.com/alexnguyen9/arampredict)**
 - Wrote a script to scrape match data from the Riot API.
 - Implemented logistic regression to predict match results based the characters present on each team, as well as ranking individual characters from best to worst.
- **Classifying Plankton with Convolutional Neural Networks Using Pytorch**
 - Developed and trained convolutional neural networks to classify plankton species from image dataset.
 - Implemented data augmentation techniques and tuned network depth to improve validation accuracy.

EDUCATION

- **California State University, Long Beach** Long Beach, CA
Master of Science in Applied Statistics; GPA: 4.00 Jan. 2017 - Dec. 2019
- **University of California, Santa Barbara** Santa Barbara, CA
Bachelor of Science in Actuarial Science; GPA: 3.55 Sep. 2011 - Dec. 2016