

## NADER ESMAEL

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### SKILLS

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Python (Numpy, Pandas, Scikit-learn, Matplotlib, Seaborn, Tensorflow), PostgreSQL, PySpark (DataBricks), Tableau, Cloud Based Services (AWS, Google Analytics), Statistical Modeling, Machine Learning (Logistic Regression/Classification, Neural Networks, NLP, Decision Trees/Random Forests), Microsoft Office/Excel

### PROJECTS

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#### [Pitch Classification and Baseball](#) | Solo Concept Project

- Designed a Random Forest model to determine umpire accuracy in determining a strike or ball call in order to evaluate an umpire's efficiency in officiating a game based on pitch mechanics and features
- Used pybaseball (third-party Pythonic library) to collect data and wrote a python script to clean and transform unstructured pitch data into a workable dataframe
- Organized 4 million rows of pitch data (5 seasons) with 90 columns of features and determined that speed, rotation, location, and pitch type affect the call of the pitch

#### [Depression or Shower Thoughts: that is the question](#) | Solo Concept Project

- Extracted 20,000 Reddit posts using Pushift API and designed an NLP-based Random Forest classifier that differentiates if a post is a random thought or exhibits signs of depression
- Utilized r/depression and r/showerthoughts subreddits to study language and behavior, discovering overlap and words of importance to help understand misclassifications of depression

#### [It's Kiva Time](#) | Team-Based Project

- Collaborated with a team to predict funding trends and churns on microloans by evaluating factors such as loan amount, country, borrower's gender, etc. using a multitude of models (GLM Poisson, Random Forest, Regression, etc.)
- Managed the github repository, created the EDA and data visualizations, and ran high-memory intensive models to assist teammates lacking hardware and processing power

### WORK EXPERIENCE

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#### **Harvey & Company LLC**

Newport Beach, CA

*M & A Research Analyst*

*March 2019 - January 2020*

- Increased top-line revenue to 400%
- Improved research efficiency for interns and analysts to determine "proper fits" - companies whose services cooperate and collaborate effectively with each other and expand client business portfolios
- Created marketing materials and finance reports for bi-weekly meetings with executives and management teams to go over research efforts and other necessary information regarding possible mergers

#### **Cal Poly Pomona Associated Student, Inc.**

Pomona, CA

*Conference & Events Student Assistant*

*August 2017 - August 2018*

- Supervised and trained six other team members including safety training, operation management, and time allocation
- Supported management through identifying process improvements and position the business for growth potential

#### **Filipino Basketball League (FBL)**

Moreno Valley, CA

*Statistician*

*June 2014 - June 2018*

- Achieved 20% increase in profits through fundraisers, promotions, food sales, and maintaining strong client relations to teams and sponsors all over Moreno Valley
- Managed and recorded live basketball stats to efficiently run same-day tournaments and create data visualizations and presentations for audience and players to view and understand

### EDUCATION

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#### **General Assembly**

Los Angeles, CA

*Data Science Immersive*

*September 2020 - December 2020*

#### **California State Polytechnic, University (Pomona)**

Pomona, CA

*Applied Mathematics & Statistics*

*September 2014 - June 2018*

- Datafest 2018 (Data Dudes) - High Ranking Participant
- President & Founder of Sportsfest Club (2016-17)
- Athletics Chair of Barkada (2016-17)
- Internal Affairs Director of PASK (2015-2016)