

# PHILLIP LAGOC

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## EDUCATION

### UNIVERSITY OF CALIFORNIA, SAN DIEGO

*Major in Cognitive Science, w/ Specialization in Machine Learning; Minor in Computer Science*

*GPA: 3.60*

*Relevant Coursework:*

Data Science in Practice, Modeling and Data Analysis, Software Tools and Techniques Lab, Neural Networks and Deep Learning, Advanced Data Structures, Computer Organization and Systems Programming, Machine Learning, Mathematics for Algorithms and Systems

La Jolla, CA  
Sept. 2016 – Jun. 2020

## EXPERIENCE

### MACHINE LEARNING LAB MEMBER

**Center for Peace and Security Studies - Machine Learning for Social Science Lab**

*Contact: Thomas Leo Scherer – [tlscherer@ucsd.edu](mailto:tlscherer@ucsd.edu)*

La Jolla, CA  
Jan. 2019 – Present

- Collaborating with PhD students from Social Science and technical backgrounds to create machine learning models to solve problems in the social sciences.
- Using ggplot to analyze over 350,000 observations of a dataset being used to train a date-parsing package, as well as Python to benchmark other date-parsing packages to understand the landscape of competition.
- Maintaining efficient communication and workflow by arranging and leading biweekly meetings and by documenting weekly tasks into an easily accessible slide deck to collaborate efforts, updating it with my progress accordingly.

### INSTRUCTIONAL ASSISTANT

**UC San Diego Cognitive Science Department**

*Contacts: Eran Mukamel – [emukamel@ucsd.edu](mailto:emukamel@ucsd.edu), Shannon Ellis – [shannon0ellis@gmail.com](mailto:shannon0ellis@gmail.com)*

La Jolla, CA  
Mar. 2019 – Dec. 2019

- Led weekly sections of 20 students each week for two Data Science classes, assisting students with data gathering and preprocessing, graph visualization, data analysis, machine learning techniques, and industry-standard practices.
- Received over a dozen extremely positive evaluations regarding my performance, including the highest rating for overall performance from the professors of each class.

### ANDROID DEVELOPER INTERN

**TheTalkList, LLC.**

*Contact: Andres Abeyta – [aabeyta@thetalklist.com](mailto:aabeyta@thetalklist.com)*

San Diego, CA  
Aug. 2017 – Jan. 2018

- Collaborated with an international team to test, develop, and implement UI changes in their Android tutoring app.
- Found and debugged over 10 bugs in each new APK.
- Distinguished amongst cohorts by receiving a personal compliment from CEO Andres Abeyta, who recognized my communication and problem-solving skills in debugging the app.

## PROJECTS

### Advanced Regression: Housing Price Competition

Dec. 2019 – Jan. 2020

- Competed in Kaggle's Advanced Regression: Housing Price Competition, ranking in the top 30% of over 5,500 leaderboard entries.
- Doubled my previous score on the leaderboard by employing ensemble techniques using machine learning packages including xgboost, LightGBM, and sklearn.

### A\* Navigation System

Dec. 2019

- Implemented A\* algorithm in C++ on a self-implemented graph of geographical cities with accurate coordinates within the United States using a simple heuristic function involving the Euclidean distance between two cities.
- Scripted a means of retrieving the longitudes and latitudes of a list of cities using Python and OpenCage geocoder for more realistic navigation instead of using the arbitrary values given in the initial dataset.

### Kruskal's and Dijkstra's ActorGraph

Nov. 2019 – Dec. 2019

- Implemented Kruskal's algorithm with a self-implemented Up-Tree in C++ on a self-implemented graph of over 400,000 actors and 290,000 movies to find a minimum spanning tree of actors using the most recent movies.
- Implemented Dijkstra's algorithm to get the shortest weighted path between two actors in the above graph, using movies as edges and a movie's release year as the weight.

### AWENG Experiment

Sept. 2018 – Mar. 2019

- Developed an audio and visual behavioral experiment in the browser using JsPsych that was demonstrated in a 2018 international linguistics conference.
- Coded several new, custom plugins built specifically for the experiment, reducing data analysis time for other lab members.

## SKILLS

**Technical:** Java, Python, PostgreSQL, HTML/CSS/ JavaScript, R, C/ C++, Android, Jupyter Notebook, Git

**Non-Technical:** Tutoring, Cooperative, Fast-Learner, Communicative