# CONNER DIPAOLO

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## **EXPERIENCE**

## Jet Propulsion Lab – Pasadena, CA

June 2018 - Present

Research Intern - Deep Space Optical Communications

- · Designed improved algorithms for estimation of parameters in a communications link designed to go to space with the Psyche mission in 2022, and applied these methods to closing a downlink control loop.
- · Proved sample complexity bounds and concentration inequalities for current estimations scheme.

**Yelp** - San Francisco, CA

May 2017 - August 2017

Intern - Ad Creative

- · Project lead for implementing the first trained model for advertisement photo selection within Yelp using a deep neural network implemented in PyTorch.
- · Designed, organized engineers, and heavily contributed to an internal web app for automated Bayesian analysis of Yelp A/B tests with potential to be used across all of Ads.

**Yelp** - San Francisco, CA

May 2016 - August 2016

Intern - Spam Team

- · Primary contributor to a widely used database replication service marshalling Kafka messages into MySQL.
- · Integral in design and implementation of a model development framework used across the spam team.
- · Utilized framework to retrain a stale spam detection language model, currently best performing in the team.

Veritone Media – Newport Beach, CA

July 2015 - August 2015

Intern – Public company giving corporations actionable insight into media.

· Developed a production ready, open source sentiment analysis engine using my own machine learning library (using a Naive Bayes model on IMDB data.)

Soulsoup - Newport Beach, CA

December 2014 - August 2015

Lead Engineer - Non-profit networking people who give with people who need. Funded by Veritone founder.

· Developed a scalable API in Go interacting with a PostgreSQL database and a mobile frontend.

## **OPEN SOURCE**

GOML

github.com/cdipaolo/goml

Creator

- · Wrote the second most starred Golang machine learning libary on GitHub (> 880 stars).
- · Developed the only library using data channels to train models in an online and parallelizable way.

## **EDUCATION**

Harvey Mudd College - Claremont, CA

Expected Graduation 2019

Mathematics – 3.85 in-major GPA

3.78 GPA

September 2017

Courtney S. Coleman Prize – Harvey Mudd College

Recipient - For Outstanding Performance in Mathematics as a Sophomore

Mathematics of Big Data – Teaching Assistant

math189r.github.io

- · Designed syllabus, created course materials, and wrote midterm with guidance from Professor Weiqing Gu.
- · Lectured supplementary material and review sessions weekly.
- · Held office hours and graded student work, projects, and exams.