

# CONNER DIPAOLO

github.com/cdipaolo

cdipaolo@hmc.edu – (949) 300 3774

## 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 library 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

**Courtney S. Coleman Prize** – Harvey Mudd College September 2017  
*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.