

CONNER DIPAOLO

github.com/cdipaolo

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EXPERIENCE

Jet Propulsion Lab – Pasadena, CA

June 2018 - August 2018

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.
- Developed the first consistent algorithm for optical beam centroiding using low resolution receivers.
- Proved sample complexity bounds and concentration inequalities for current and novel estimations schemes.

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 (augmented ResNet structure) implemented in PyTorch.
- Automatically detected long-standing flaw in cropping infrastructure by maintaining model interpretability.
- 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.

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 - Second most starred Golang machine learning library on Github with > 900 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 – 3.87 in-major GPA

3.81 GPA

Giovanni Borrelli Mathematics Prize – Harvey Mudd College

September 2018

Sole Recipient – “... and shows promise of contributing in an important way to the mathematical sciences.”

Mathematics of Big Data – Teaching Assistant

math189r.github.io

Advanced Linear Algebra – Teaching Assistant

math173.github.io

- Designed syllabi, created course materials and homework, and lectured review/supplementary material weekly.