

# Reuben Britto, Ph.D.

reubritto@gmail.com | 530 351 8232 | reubenbritto.com | Seattle, WA

## EXPERIENCE

**EVEN** Financial - *fintech startup acquired by MoneyLion in Feb 2022* *New York, NY*

**Senior Machine Learning Engineer** *Jan 2021 - Present*

- Building model lifecycle infrastructure ranging from easy-to-use python libraries that enable data scientists to develop, train, deploy, and persist models (all from their Jupyter notebooks) to CI/CD pipelines for automated model retrains. This infrastructure has dramatically improved our velocity increasing the number of models in production 10x.
- Technical owner of model serving microservice (scala-play) that handles request routing, prediction logging, feature engineering and caching, etc. Serves upwards of 5000 req/min at sub 30 ms latency (p95).
- Trained and deployed models of various complexities ranging from logistic regression to decision trees to neural networks for real time recommendation and ranking of financial products and offers to our users.
- Building “frontend for models” webapps that empower data scientists and partner managers to automatically monitor and optimize model performance for their clients through intuitive UIs, improving client monetization and NPS metrics.

**Exponent** *failure analysis firm* *Menlo Park, CA*

**Materials Engineer (Data Science & Machine Learning)** *May 2019 - Jan 2021*

- Built automated inference pipelines. Example: a classification pipeline that analyzed post-mortem chemical characterization data reports and sorted catalysts into root cause categories, reducing human-hours to analyze each catalyst from hours to < 1m.
- Led teams of 3-4 performing experimental design and statistical reliability engineering for diverse clients in the consumer electronics industry, managing \$10k - \$100k projects.

**ExxonMobil** Research and Engineering *Clinton, NJ*

**Computational Materials Intern** *Apr 2018 - Sep 2018*

- Developed a selective diffusion zeolite detection algorithm and deployed it in a high throughput screening pipeline that discovered a promising new zeolite resulting in 2 US patents.

**Stanford University** *Palo Alto, CA*

**Computational & Experimental Researcher, Jaramillo Lab** *Sep 2013 - May 2019*

- Predicted novel materials to improve corrosion stability of solar fuels devices using machine learning and computational methods such as density functional theory and principle component analysis. Tested materials in collaboration with the National Renewable Energy Laboratory.

## PROJECTS

- I imagine myself as a poor man's Copernicus and built a React-based webapp to compute the position of the sun in the sky at any location in the world on any date and time. Check it out here: [reubenbritto.com/solartracker](https://reubenbritto.com/solartracker)

## ABOUT ME

I'm a Machine Learning Engineer who loves to unlock the potential of data scientists. I can do the [other 90%](#) needed to deploy real-world machine learning and AI systems.

## EDUCATION

**Stanford University** *Palo Alto, CA*  
Ph.D. & M.S. Chemical Engineering  
2019

**Caltech** *Pasadena, CA*  
B.S. Chemical Engineering  
2013

## AWARDS & HONORS

National Science Foundation -  
Graduate Research Fellowship  
American Institute of Chemical  
Engineers - Chapter President  
Tau Beta Pi Honor Society

## PUBLICATIONS & PATENTS

*Interfacial engineering of gallium indium phosphide photoelectrodes for hydrogen evolution with precious metal and non-precious metal based catalysts.*

**Britto**, Young, Yang, Steiner, LaFehr, Friedman, Beard, Deutsch, Jaramillo.  
*J. Mater. Chem. A*, 2019, 7, 16821-16832

*Molybdenum Disulfide as a Protection Layer and Catalyst for Gallium Indium Phosphide Solar Water Splitting Photocathodes*

**Britto**, Benck, Young, Hahn, Deutsch, Jaramillo.  
*J. Phys. Chem. Lett.* 2016, 7, 11, 2044–2049

*Production of Alkylaromatic Compounds.* **US Patent No.** US-20220371972-A1 & US-20220356132-A1

## LINKS

 [reubenbritto.com](https://reubenbritto.com)

 [linkedin.com/in/reuben-britto](https://linkedin.com/in/reuben-britto)

 [github.com/rjb1116](https://github.com/rjb1116)