Reuben Britto, Ph.D.

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EXPERIENCE

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

Senior Machine Learning Engineer — *Jan 2021 - Present*

- Building easy-to-use python libraries that abstract away back-end db and deployment infrastructure enabling data scientists to develop, train, deploy, and persist models all from their Jupyter notebooks. These libraries have dramatically improved development velocity allowing us to more than 10x the number of models in production.
- Technical owner of model serving microservice (scala-play) that handles request routing, prediction logging, feature pre-processing and caching, etc. Serves upwards of 5000 req/min at sub 30 ms latency (p95).
- 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.
- Fabricated promising candidate materials and built prototype devices that were tested 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
- Checkout my github and/or my website to see projects in various states of ideation, completion, and documentation.

ABOUT ME

I'm a Machine Learning Engineer who loves to unlock the potential of data scientists. I 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

linkedin.com/in/reuben-britto

github.com/rjb1116