WORK EXPERIENCE

Data Science Manager, Proofpoint, Durham, NC

2022 - Pres.

- Leading a team of engineers and data scientists to create and maintain ML models for three Proofpoint products: 4 models in production, 2 more by EOY.
- Collaborating with MLOps to architect solutions for model versioning, deployment pipelines, and production monitoring within our ML Platform.
- Revamped the onboarding and interview process, mentored multiple summer interns, and co-organized remote social events for the ML Labs organization.

Senior Data Scientist, Proofpoint, Durham, NC

2021 - 2022

2019 - 2021

- Data Scientist
 - Responsible for performance of all ML models within Proofpoint Patrol product.
 - Deployed 3 new models for social media classification: BERT NER model for locations, FastText classifier for complaints, patented promissory image classifier.
 - Created customer-facing model cards and evaluation dashboards for all classifiers.

Senior Data Scientist, Automated Insights, Durham, NC Data Scientist

2018 - 2019

2017 - 2018

- Deployed a contextual synonym suggester using custom word vectors.
 - Designed, prototyped, and patented a natural language generation system for BI dashboards alongside software engineers, designer, and product manager.

EDUCATION

M.S. in Engineering, Duke University

2017

Abdicated PhD Student

Dr. Nimmi Ramanujam (BME): Point-of-Care Optical Cancer Imaging

Dr. Larry Carin (ECE): Deep Learning for Threat Detection in TSA Bag Scans

B.Sc. in Biomedical Engineering, NC State University

2014

Bioinstrumentation Concentration. Minor in Piano Performance.

PATENTS

Augmented Natural Language Generation Platform, Automated Insights, 2019 Method for Identifying Threats From Social Media Content, Proofpoint, 2022 Systems and Methods For Promissory Image Classification, Proofpoint, 2022

PAPERS

- D Salo, H Zhang, DM Kim, MY Berezin. Multispectral measurement of contrast in tissue-mimicking phantoms in near-infrared spectral range of 650 to 1600 nm. Journal of Biomedical Optics, 2014.
- H Zhang, D Salo, DM Kim, S Komarov, YC Tai, MY Berezin. Penetration depth of photons in biological tissues from hyperspectral imaging in shortwave infrared in transmission and reflection geometries. Journal of Biomedical Optics, 2015.

HONORS

Proofpoint Critical Impact Award (2019), Automated Insights Hackathon 3rd place (2018), NSF GRFP Honorable Mention (2016), James B. Duke Fellowship (2014), NC State Goldwater Nomination (2013), NC State Caldwell Fellow (2010)