

Clayton Dean Blythe

Email: claytondblythe@gmail.com

Github: github.com/claytonblythe

Personal Blog: deepython.com

PROFESSIONAL PURSUIT

Employ my analytical, communicative, and leadership skills as a software engineer to advance the impact of machine learning software on society.

EXPERIENCE

Asurion, San Mateo, CA

- Machine Learning Engineer

2018 – Present

- Implemented real-time microservice serverless solutions with AWS Lambda in python for mobile client application backend API's and machine learning use cases, supporting apps with >1M downloads
- Developed multimillion node graph database built upon Apache Tinkerpop, AWS Neptune, and custom python modules for knowledge representation and query optimization

Ford Motor Company, Dearborn, MI

- Machine Learning Scientist

2017

- Lead machine learning project for credit origination on \$30B portfolio, implemented REST API in Flask to productionalize a .03 AUC improvement, estimated savings at \$4M over a five-year time frame
- Employed machine learning techniques in python, apache spark, and deep learning for applied research in financial lending of \$30,000 median loan amounts

Vanderbilt University, Nashville, TN

- Computational Nanoscience Research Assistant

2016

- Utilized computational approach with python, pandas, scipy, Fortran, and numpy to simulate femtosecond-scale high harmonic generation in Helium due to counter-rotating circularly polarized laser fields

University of Maryland, College Park, MD

- National Science Foundation Fellow

2015

- Developed graphical interface in MATLAB, optimizing Lithium-ion microbattery thin-film deposition
- Received award for “Best Oral Presentation” out of more than two dozen researchers
- Research led to a formal presentation at the American Physical Society March Meeting

John Deere Financial, Johnston, IA

- Data Science Intern

2015

- Performed complex SQL queries to gather multi-dimensional customer and commercial data for binary classification of default for over one million collections accounts
- Employed algorithms such as logistic regression, SVM, and parallelized random forest within a Hadoop ecosystem, vastly reducing time required for model redevelopment

EDUCATION

• Georgia Institute of Technology - Masters in Computer Science 2020

• Central College - BA Physics & Economics, *Summa Cum Laude*

SKILLS

- Python, AWS, Spark, Terraform, PyTorch, Docker, SQL, R, Scala, Tensorflow, Linux, Git

PROJECTS & HONORS

- Technical co-founder of deep learning facial detection video startup built on AWS infrastructure
- Deep learning music genre recognition utilizing CNN's on six-second spectrograms
- Vanderbilt University, University of Maryland National Science Foundation REU | Best Oral Presentation