# **Clayton Dean Blythe**

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#### PROFESSIONAL PURSUIT

Employ my analytical, communicative, and leadership skills to advance machine learning in society and industry.

### **EXPERIENCE**

Ford Motor Company, Dearborn, MI

July 2017 - Present

- Machine Learning / Artificial Intelligence Scientist
- Utilized state of the art machine learning techniques in python, spark, and deep learning for cyber security, computer vision, and autonomous vehicle initiatives.
- Employed machine learning and artificial intelligence tools such as neural networks, regression, classification, and clustering.

John Deere Financial, Johnston, IA

- Intern, Credit Risk Predictive Modeling

January 2017 - July 2017

- Performed complex SQL queries and joins to gather multi-dimensional customer and commercial data for binary classification of default for over one million accounts in collections with 39 variables
- Employed advanced machine learning algorithms such as logistic regression, SVM, and parallelized random forest in R within a Hadoop framework to improve classification accuracy by 15%

Vanderbilt University, Nashville, TN

- Computational Nanoscience Research Associate

Summer 2016

- Utilized computational approach in python, pandas, scipy, and numpy to simulate femtosecond scale high harmonic generation in Helium due to counterroating polarized laser fields
- Utilized large scale data cleaning, Fourier transform, linear algebra, and visualization in matplotlib

University of Maryland, College Park, MD

- National Science Foundation Fellow

Summer 2015

- Developed graphical user interface in MATLAB to predict and optimize microbattery thin-film deposition
- Received award for "Best Oral Presentation" out of more than 30 undergraduate researchers
- Research led to a conference presentation at the American Physical Society March 2016 Meeting

#### **EDUCATION**

Central College, Pella, IA - Bachelor of Arts

May 2017

- Majors: Physics & Economics, Summa Cum Laude
- Bangor University, Bangor, Wales, United Kingdom

Spring 2015

# **SKILLS**

• Python, R, SQL, SAS, Git, Docker, AWS, Hadoop, PyTorch, TensorFlow, ggplot2, Linux, matplotlib

#### **PROJECTS**

- Random Forest Model for binary classification of income using U.S. Census Data and scikit-learn
- S&P 500 historical investment outcome distribution and heatmap analysis written in R
- Wunderground, Twilio API, selenium, shell scripting to text daily weather forecasts/menus to my iphone

## **HONORS**

- Vanderbilt University, National Science Foundation Nanoscience Fellowship
- University of Maryland, National Science Foundation Nanoscience Fellowship, Best Oral Presentation
- Outstanding Senior in Economics Award | Richard Mentink Award in Physics