# JEREMY K. THALLER

jeremy@jeremythaller.com \( \phi\) jeremythaller.com \( \phi\) github.com/jthaller \( \phi\) 978-496-7990

About: US citizen; Aug. 2021 MSci. graduate with ML experience; looking for entry level data science roles

#### **EDUCATION**

Adam Mickiwicz University
(Anticipated) MSci. in Applied Physics

Ludwig Maximilians & Technische Universität München
(Anticipated) MSci. in Materials Science and Engineering

Williams College

B.A. in Physics with Honors | GPA 3.3

2019 – Aug. 2021

Munich, Germany

Williamstown, MA

WORK EXPERIENCE

#### Brookhaven National Lab

Feb. - Aug. 2021

Master's Thesis Researcher, Structure and Dynamics of Applied Nanomaterials Group

Sigma Xi Honors Society Inductee | Captain of Track & Field Team

(Current) Developed a new technique to simulate disordered structures utilizing skew-norm functions, reducing compute time by 50X; built a neural network with TensorFlow to predict disorder from particle accelerator data, reducing the amount of required training data by 90%

Yale University Summer 2019

Postbac Researcher, Department of Mechanical Engineering and Materials Science

Formulated an experiment to isolate the causal variable behind nanowire lattice orientation; wrote and deployed a python program to automate repetitive calculations, simplifying candidate screening and reducing overhead time by  $10\times$ 

Williams College 2018 - 2019

Undergraduate Thesis Researcher, Department of Physics

Designed and built components for a new strain-dependent surface stress measuring methodology; wrote MATLAB scripts to automate the complex data analysis process to be click-to-run, predicting the targeted features with multinomial linear regressions

#### TECHNICAL STRENGTHS

Programming Languages Python, MATLAB, SQL, Java, Arduino (C/C++)

Python Packages Pandas, NumPy, Scikit-Learn, PyTorch, TensorFlow, KERAS,

Tensorboard, Seaborn, Matplotlib, Regex, Optuna, Plotly/Dash Mathematica, Quantum Espresso, Excel, LabView, LoggerPro

Visualization Software LaTeX, Solid Works, VESTA, Adobe Illustrator, Adobe Photoshop

DATA SCIENCE PROJECTS

Data Software

#### Facebook Messenger Analysis

HTML and JSON scraping, statistics analysis and visualization, mystery friend classifier, and chatbot

## Organic Semiconductor Optimization Predictor

Neural network to reduce semiconductor candidate screening time by  $100 \times$ 

### DATA SCIENCE SKILLS

Data Cleaning and Feature Engineering, SSH + VIM, Unix Command Line (BASH), Git and Version Control, Probability and Statistics (Bayesian), Neural Networks and Deep Learning, Natural Language Processing, Image Classification and Computer Vision, Recommendation Systems