JEREMY K. THALLER

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About: *US citizen; Aug. 2021 MSci. graduate with significant python and ML experience*

EDUCATION

Ludwig Maximilians & Technische Universität München 2019 – Aug. 2021
(Anticipated) Joint MSci. in Materials Science and Engineering *Munich, Germany*

Adam Mickiwicz University 2019 – Aug. 2021
(Anticipated) MSci. in Applied Physics *Poznan, Poland*

Williams College *2015 – 2019*
B.A. in Physics with Honors | GPA 3.3 *Williamstown, MA*
Sigma Xi Honors Society Inductee | Captain of Track & Field Team

WORK EXPERIENCE

Brookhaven National Lab Feb. – Aug. 2021
Master's Thesis Researcher, Structure and Dynamics of Applied Nanomaterials Group

Applying supervised machine learning to particle accelerator data to determine nanoparticle disorder from x-ray absorption near edge (XANES) spectroscopy spectra

Yale University Summer 2019
Postbac Researcher, Department of Mechanical Engineering and Materials Science

Nanomolded crystalline metals and analyzed the samples with electron microscopy; wrote and deployed a python program to quicken repetitive calculations

Williams College 2018 – 2019
Undergraduate Thesis Researcher, Department of Physics

Designed and CNC milled a stretching apparatus for soft materials; collected data via confocal microscopy, processed and analyzed data with MATLAB and multinomial linear regressions to measure the strain dependency of solid surface stress in silicone gel.

Williams College Summer 2017
Undergraduate Research Assistant, Department of Physics

Programmed and installed a PID controller to regulate furnace temperatures within 1 °C, designed a deposition-rate detector, and analyzed absorption spectrum data with MATLAB and Mathematica

TECHNICAL STRENGTHS

Programming Languages	Python, MATLAB, SQL, Java, Arduino (C++ Variant)
Python Packages	Pandas, NumPy, Scikit-Learn, PyTorch, TensorFlow, KERAS, Optuna Tensorboard, Seaborn, Matplotlib, Plotly/Dash
Data Software	Mathematica, Quantum Espresso, Excel, LabView, LoggerPro
Visualization Software	LaTeX, Solid Works, VESTA, Adobe Illustrator, Adobe Photoshop

RECENT PROJECTS

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×

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