

JEREMY K. THALLER

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EDUCATION

Adam Mickiewicz University

(Anticipated) MSci. in Physics of Advanced Materials for Energy Processing

2019 – Aug. 2021

Poznan, Poland

Ludwig Maximilians & Technische Universität München

(Anticipated) MSci. in Geomaterials and Geochemistry

2019 – Aug. 2021

Munich, Germany

Williams College

B.A. in Physics with Honors | GPA 3.3

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

2015 – 2019

Williamstown, MA

WORK EXPERIENCE

Master's Thesis Researcher

Structure and Dynamics of Applied Nanomaterials Group

Feb. – Aug. 2021

Brookhaven National Laboratory

Applied supervised machine learning to synchrotron data to determine underlying structure

Postbac Researcher

Department of Mechanical Engineering and Materials Science

Summer 2019

Yale University

Nanomolded crystalline metals and analyzed the samples with SE and TE microscopy, wrote and deployed a python program to quicken repetitive calculations

Undergraduate Thesis Researcher

Department of Physics

2018 – 2019

Williams College

Designed with SolidWorks and CNC milled a stretching apparatus for soft materials, collected data via confocal microscopy, processed and analyzed data with MATLAB and multinomial linear regressions

Undergraduate Research Assistant

Department of Physics

Summer 2017

Williams College

Programmed and installed a PID controller to regulate furnace temperatures within 1 degree C, designed a deposition-rate detector for an indium cell chamber, and analyzed data with MATLAB and Mathematica

TECHNICAL STRENGTHS

Programming Languages

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

Python Packages

Pandas, NumPy, Scikit-Learn, PyTorch, Tensorboard, KERAS, TensorFlow, Seaborn, Matplotlib, Regex, Optuna

Data Software

Mathematica, Quantum Espresso, Excel, LabView, LoggerPro

Visualization Software

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

DATA SCIENCE 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