

# JEREMY K. THALLER

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## EDUCATION

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<b>Adam Mickiewicz University</b> (Anticipated) MSci. in Physics of Advanced Materials for Energy Processing	2019 – Aug. 2021 <i>Poznan, Poland</i>
<b>Ludwig Maximilians &amp; Technische Universität München</b> (Anticipated) MSci. in Geomaterials and Geochemistry	2019 – Aug. 2021 <i>Munich, Germany</i>
<b>Williams College</b> B.A. in Physics with Honors   GPA 3.3 Sigma Xi Honors Society Inductee   Captain of Track & Field Team	2015 – 2019 <i>Williamstown, MA</i>

## WORK EXPERIENCE

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<b>Brookhaven National Lab</b> <i>Master's Thesis Researcher, Structure and Dynamics of Applied Nanomaterials Group</i> Applied supervised machine learning to synchrotron data to determine underlying structure	Feb. – Aug. 2021
<b>Yale University</b> <i>Postbac Researcher, Department of Mechanical Engineering and Materials Science</i> Nanomolded crystalline metals and analyzed the samples with electron microscopy, wrote and deployed a python program to quicken repetitive calculations	Summer 2019
<b>Williams College</b> <i>Undergraduate Thesis Researcher, Department of Physics</i> 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 to measure the strain dependency of solid surface stress	2018 – 2019
<b>Williams College</b> <i>Undergraduate Research Assistant, Department of Physics</i> 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	Summer 2017

## TECHNICAL STRENGTHS

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

## DATA SCIENCE PROJECTS

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<b>Facebook Messenger Analysis</b> HTML and JSON scraping, statistics analysis and visualization, mystery friend classifier, and chatbot
<b>Organic Semiconductor Optimization Predictor</b> Neural network to reduce semiconductor candidate screening time by 100×

## DATA SCIENCE SKILLS

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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