

John L. Theurer

San Francisco, CA · Phone: (352) 672-3196 · theurerjohn3@gmail.com

EDUCATION

University of California Los Angeles | Los Angeles, CA

2016-2020

Bachelor of Science, Physics

- Relevant Coursework: Multivariate Calculus, Linear Algebra, Probability Theory, Introduction to Algorithms, Differential Equations, Fundamentals of Artificial Intelligence, Machine Learning Algorithms, Classical Dynamics, Quantum Mechanics, Acoustics, Electromagnetism, Nuclear Physics, Probabilistic Programming

University of Florida | Gainesville, FL

2014-2016

Dual enrollment High School Student

- Graduated high school with over 60 UF credits, Recipient of \$60,000 merit-based scholarship

PROFESSIONAL EXPERIENCE

Zither Labs, LLC | Remote

2020-Present

Data Scientist

Tools: Python (scipy, pandas, numpy, scikit-learn, jupyter, matplotlib)

- Developed ensemble model to categorize fluid life cycle
- Wrote an online algorithm to reduce expenses by reducing lubricant changes in heavy machinery
- Used EIS data of 100 frequencies at variable temperatures to develop a fluid specific model of the changes in each lifecycle
- Wrote modular code for a back-testing framework that allows for algorithms to be swapped in and out, to speed up development time and produce visualizations
- Created metrics to compare algorithms within the framework on issues of minimum required data and accuracy

Infotech, Inc. | Gainesville, FL

2017, 2018

Intern for Data Analytics Team

Tools: Python (scipy, pandas, numpy, scikit-learn, jupyter, matplotlib), SQL, bash

- Used time series analysis to track and forecast product sales and usage patterns
- Created visualizations to inform management decisions about expansion and pricing
- Used machine learning techniques (k-means, linear classifier SVM, binary tree classifier) to predict user actions to facilitate the creation of a recommendation system

Neutrino Research Group | Gainesville, FL

2014-2016

Undergraduate Physics Research Assistant for Dr. Heather Ray and Dr. Darren Acosta

Tools: C++ (ROOT), bash

- Modeled neutrino interactions in the Helium target of the MINERvA detector during three semesters at UF and summer internship at FermiLab using ROOT
- Analyzed the efficiency differences between data identification programs

LEADERSHIP AND CAMPUS INVOLVEMENT

UCLA Bruin Space | Los Angeles, CA

2016-2020

- Competitively selected by NASA's Micro-g NExT to produce a prototype surface sampling tool for micro-gravity environments which was tested at the Neutral Buoyancy Lab
- Debated at first collegiate Space Policy Debate at University of California, Berkeley

Team Lead for Reach Operations

- Developed a filter to accurately estimate rocket position from gyroscope, accelerometer, altimeter, and GPS data

Project Manager of the Sandbox Division

- Managed 3 teams for NASA's Micro-g NExT competition to produce various macro gravity devices, one team went on to test in the Neutral Buoyancy Lab
- Won Lens R&D Sunsensor Challenge, earning a BiSon 64 sun sensor