John L. Theurer

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EDUCATION

University of California Los Angeles | Los Angeles, CA 2016-Present
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

University of Florida | Gainesville, FL 2014-2016
Dual enrollment High School Student

- Relevant Coursework: Discrete Math, Engineering Statistics, Technical Writing for Engineers, Data Structures and Algorithms, Introduction to Probability

TECHNICAL SKILLS

- **Computer:** Experienced in Python, C++, Lisp, Scala, Linux operating systems
- **Statistics:** Time Series Analysis, Markov Chains, Regression, Machine Learning

PROFESSIONAL EXPERIENCE

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-Present

- 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 accurate 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

AWARDS

The Education Foundation of Alachua County, Florida 2016

- Venture Afar $60,000 College Scholarship

National Merit Scholar Finalist 2016
Moody's Mega Math National Challenge

- Honorable mention and $1000 college scholarship for team submission 2016
- One of top 201 papers out of 1128 submitted 2015