# Tom Butler

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#### EDUCATION

#### Occidental College

Los Angeles, CA

Bachelor of Arts in Mathematics and Kinesiology: Cumulative GPA: 3.47/4.00

Aug. 2016 - May 2021

- Mathematics Major GPA: 3.85/4.00, Kinesiology Major GPA: 3.46/4.00
- Focus of Studies: Applied and Computational Mathematics, Biomechanics
- Awards: Deans List (2017-2021), Kinesiology Department Ambassador

#### Experience

# **Operations Research Intern**

January 2021 - May 2021

 $SportsID\ Inc.$ 

Atlanta, GA

- Interact and communicate closely with operations research and executive team to be successful in a startup environment.
- Duties include business operations research, product development and data analysis.

# Mathematics Teaching Assistant and Grader

August 2020 – May 2021

Occidental College

Los Angeles, CA

- Assisted in managing and grading homework assignments for the linear algebra and partial differential equations courses at Occidental College.
- Worked directly with the professor and students to ensure curriculum was being delivered efficiently.

Merchandiser

July 2020 – September 2020

Total Wine & More

Pasadena, CA

- Duties included day to day inventory management and front of store customer service.
- Assisted in sales and online order management for more than \$500,000 in weekly revenue.

# Human Anatomy & Biomechanics Tutor

August 2018 – May 2020

Scientific Scholars Acheivemnt Program

Los Angeles, CA

- Designed worksheets and study plans for students in the Occidental College kinesiology courses, including human anatomy and biomechanics.
- Set up private meetings with students to provide one-on-one help to ensure curriculum was understood sufficiently.

# Clinical Intern

August 2018 – December 2018

Glendale Adventist Health

Glendale, CA

- Worked closely with staff physicians in day to day operation, including patient appointments and facility upkeep.
- Documented and analyzed pathology on case to case basis.

## Undergraduate Research Projects | Full portfolio can be viewed on Github page linked above

# "Optimized Conversion of Categorical and Numerical Features in Machine Learning Models"

- Preparation for Industrial Careers in Mathematics sponsored research semester, partnered with Adobe Research.
- Developed machine learning models for data sets ranging from 32,000 to 40,000,000 rows.
- Python based code, utilized pandas, NumPy, Matplotlib, Scikitlearn and TensorFlow libraries.
- Evaluated performance on how numerical and categorical values were handled by each model.

# TECHNICAL SKILLS

Languages: Java, Python, R, HTML, CSS, Javascript

Python Libraries: pandas, NumPy, Matplotlib, Scikitlearn

Productivity Programs: Microsoft Office, PyCharm, IntelliJ, VS Code, LaTeX

## LEADERSHIP AND ACTIVITIES

NCAA Athlete and Coach: Occidental College Varsity Baseball (2016-2020), Team Captain (2019-2020), Assistant Pitching Coach (2020-2021)