CONNOR J. MCWARD

cmcward@berkeley.edu • (408) 833-4721 • linkedin.com/in/connormcward

WORK EXPERIENCE

Data Scientist – Virtualitics **San Jose, CA**
Contract *September 2024 – Present*
Internship *July 2024 – September 2024*

- Partnered with DoD to perform exploratory data analysis and develop an ensemble machine learning model, enhancing cybersecurity threat detection capabilities.
- Designed and built Proof of Concepts (PoCs) for Fortune 1000 clients, leveraging Jupyter Notebooks and the Virtualitics platform to demonstrate AI-driven insights tailored to client needs.
- Developed automated data cleaning and engineering pipelines in Python, optimizing the preparation of client data for analysis, which streamlined the PoC development process and improved overall efficiency.
- Created custom data visualization dashboards within the Virtualitics platform, enabling clients to make informed, data-driven decisions quickly and with greater accuracy.
- Collaborated in bi-weekly meetings, offering technical insights to ensure that solutions were accessible and actionable for both data scientists and non-technical stakeholders.
- Engineered fully functional web applications using the Virtualitics SDK, showcasing the potential for significant productivity gains and cost savings, leading to contract negotiations post-PoC delivery.

Co-Founder – Line Drive Labs **San Jose, CA**
Full Time *June 2023 – June 2024*

- Spearheaded a dedicated team of 5 co-founders in the development and marketing of innovative baseball equipment.
- Engineered product enhancements to increase bat speed, substantiated by data-driven analytics.
- Utilized Python to perform comprehensive statistical analysis, validating product efficacy across multiple design iterations.
- Directed marketing initiatives, developing data-backed marketing materials to drive customer engagement.

PROJECTS & RESEARCH EXPERIENCE

Data Scientist – CSU East Bay, Business Analytics **Hayward, CA**
Capstone Project - Machine Learning Algorithms *January 2023 – May 2023*

- Developed a regression model in Python to forecast market housing prices using a dataset of 1,500 sales records and 80 features.
- Built a classification model in Python to predict hotel cancellations using a dataset with 42,000 records and 18 features.
- Compiled and presented comprehensive data-driven reports, summarizing exploratory data analysis, model optimization, and prediction accuracy evaluation.

Research Data Science Intern – UC Berkeley, Astronomy Department, Gibor Basri PhD **Berkeley, CA**
Internship *June 2018 – January 2022*

- Conducted novel data analysis using IDL to examine the autocorrelation function peaks of starspot lifetimes, demonstrating a new methodology for estimating starspot lifetimes without requiring a known rotation period.
- Preprocessed and conditioned data to visualize autocorrelation degradation as a function of a star's temperature or type.
- Employed data science techniques to identify and evaluate outlier stars and star groupings, informing future research directions.
- Coauthored the peer-reviewed article, "A New Method for Estimating Starspot Lifetimes Based on Autocorrelation Functions.", which achieved academic impact with citations in 29 scholarly articles and over 1200 downloads.

EDUCATION

California State University, East Bay – College of Business & Economics **Hayward, CA**
Master of Science in Business Analytics *January 2022 – May 2023*

- **Relevant Coursework:** Data Mining, Optimization for Analytics, Time Series Analytics, Text Mining, Business Intelligence

University of California, Berkeley – College of Letters and Sciences **Berkeley, CA**
Bachelor of Arts in Physics and Astrophysics *August 2017 – August 2020*

SKILLS & SOFTWARE EXPERIENCE

Proficient	Intermediate	Familiar
• Python	• ML Algorithms	• AWS
• SQL	• Keras	• PyTorch
• Excel	• Tableau	• PySpark
• Git/ GitHub	• NLP Techniques	• HDFS