

TIANA CURRY

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EDUCATION

University of Southern California (USC), Viterbi School of Engineering

Master of Science Computer Science

Coursework: Machine Learning, Web Technologies, Algorithm Analysis

Remote, CA

Exp Grad: May 2026

University of California Santa Barbara (UCSB)

Bachelor of Arts Mathematics, Alyce Marita Whitted Memorial Award

Coursework: Linear Algebra I-IV, Probability & Statistics I/II, Numerical Analysis I/II, Linear Regression

Santa Barbara, CA

Berkeley City College (BCC)

A.S. Mathematics, A.S. Economics, A.S. Business Admin

Berkeley, CA

SKILLS

Programming Languages: Python, SQL, R, Bash, JavaScript, HTML, CSS, Markdown

Computing Libraries: Plotly, Matplotlib, Pandas, NumPy, jQuery, AngularJS, Ajax, Bootstrap, Sklearn, SciPy, Requests

Cloud Platform DBMS: AWS, EC2, Hadoop, GCP, Firebase, MySQL, SQLite, PostgreSQL, MongoDB, DynamoDB

Tools: Visual Studio, Jupyter Lab, RStudio, MS Excel, Tableau, GitHub, Qualtrics, LaTeX, Lucidchart, Canva

EXPERIENCE

USC Dept. of Computer Science, Health-Based Cybersecurity Project

Senior Research Analyst

Remote Work

June 2024-Present

- Designed, validated the Cyber Health Vulnerability Score methodology to assess vulnerabilities in medical facilities
- Analyzed medical devices computed ecosystem factors; accessed the scoring system's effectiveness and limitations

NSF INCLUDES, Environmental Data Science Inclusion Network

Data Science Project Manager

Remote Work

January 2021-January 2022

- Forged partnerships with scientist and directors to spearhead discussions, data science initiatives and working groups
- Designed a pivotal case study on clean water access for the ADSA Data Science Ethos Tool, collaborating with the Crowd the Tap project's leading PI
- Produced a reporting and interview framework for the ADSA tool case studies, improving data collection efficiency

Hopewell Fund, Academic Data Science Alliance (ADSA)

Marketing Communications Specialist

Remote Work

January 2021-January 2022

- Led the coordination of high-impact programs for the Career Development Network a community for academics
- Directed the social media strategy and content for ADSA and prominent researchers, using Canva to design materials
- Devised and implemented a social media strategy that achieved a 300% increase in engagement within two months

UCSB Bren School, Environmental Justice Project

Research Data Analyst

Santa Barbara CA

October 2020-July 2021

- Developed visualizations of environmental compliance data to assess the impacts of COVID-19 in affected regions
- Analyzed economic status, environmental policies, and labor force dynamics providing insight in workforce trends

UCSB Dept. of Materials, Shuji Nakamura Lab

Data Analysis Engineer

Santa Barbara CA

September 2020-December 2020

- Remodeled Python scripts for precision and efficient E-field/ light intensity computations for VCSEL simulations
- Provided key analytics and visualizations adopted lab-wide, optimizing the research and development processes

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UCSB Bren School, Clean Energy Transformation Lab (CETlab)

Data Analysis Engineer

Santa Barbara CA

August 2019-December 2020

- Engineered an automated data processing tool for GridPath software, enhancing analytics and plotting capabilities
- Executed analytics on survey and energy data from nine African countries, providing key insights for energy planning
- Deployed 10+ Python scripts generating statistics, visualizations, and tables for reports and academic papers
- Streamlined data processing workflows, reducing time costs and errors while generating 600+ visualizations
- Co-authored two papers on renewable energy access in Southern Africa, advancing academic and policy discussions

UCSB Sustainable Technology Repair Initiative

Data Collections Specialist

Santa Barbara CA

September 2019-February 2020

- Designed a comprehensive campus survey using Qualtrics to analyze technology needs of over 3,000 students
- Enhanced professional writing expertise by crafting technical repair guides, improving access, clarity, and usability

Smithsonian Institution (SI), Data Science Lab

Data Science Intern

Washington, D.C.

July 2019-September 2019

- Initiated a project for the American Women's History Initiative, sharing a chronicle of women researchers' accomplishments and resilience to new audiences
- Remediated and analyzed data in Python, producing 12 data graphics about the collections of 16 researchers
- Programmed an NLP model to assess gender diversity by analyzing SI annual reports from 1856 to 2015
- Discovered critical errors in Charles Walcott's collections, revealing several samples were by wife Mary Vaux Walcott
- Contributed to papers and presentations; gained recognition with features in SI media, articles, and Sidedoor podcast

PROJECTS

Building Web Applications to access APIs

May 2024

- Spearheaded deployment of a full-stack web app from design to execution, using Flask, JavaScript, HTML, CSS
- Delivered an app integrating the eBay API through client/server-side development, enhancing user functionality

Hadoop Distributed File System Emulation Program

June 2023

- Built Python scripts, modules, server commands for a distributed file system, emulating Hadoop node servers
- Applied algorithm design, coding, testing, and debugging methodologies, and produced comprehensive user docs

Predicting Customer Purchases with ML Recommendation Systems

May 2022

- Engineered a recommendation system in Python to predict H&M purchases and enhance personalized shopping
- Led the analysis to optimize statistical methods, trained and tested advanced models, and authored final reports

UCSB CETlab Command-line Interface Application

December 2020

- Deployed an app to automate data preparation on electricity data, improving efficiency/ accuracy for ML models
- Delivered a reusable and reproducible data pipeline, contributing to the overall productivity of the CETlab

SI American Women's History Initiative, Historical Records Analysis

September 2019

- Created NLP models for text processing, sentiment analysis on 160 reports, producing charts of diversity trends
- Built 12 interactive maps of researchers' specimen collections to promote gender equality in scientific research

PUBLICATIONS

- Dikow R. B., Ekwealor J. T. B., et al. (in press). Let the records show: attribution of scientific credit in natural history collections. The University of Chicago Press Journal. 184(5). <https://www.journals.uchicago.edu/doi/epdf/10.1086/724949>
- A.F.M. Kamal Chowdhury, Ranjit Deshmukh, et al. (2022). Enabling a low-carbon electricity system for Southern Africa. Joule. 6(8) 1826-1844. <https://www.sciencedirect.com/science/article/pii/S254243512200304X>
- Curry T., Deshmukh R. (2020). Using data analysis to examine electricity demand & renewable energy in Southern Africa. Undergraduate Research & Creative Activities Journal. 2. https://urca.ucsb.edu/sites/default/files/2023-08/URCAJ_VOL_II_2020_0.pdf