Jaxon Green

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Overview

Data Scientist with expertise in developing scalable ETL/ELT pipelines, developing novel data extraction and transformation algorithms, and leveraging cloud-based solutions to generate insightful analytics. Candidate is proficient in algorithm development with strong fundamental knowledge of Python, AWS, and machine learning methodologies. Applicant specializes in deciphering intuitive metrics from messy data. Candidate seeks to contribute problem-solving skills and technical expertise to projects with real-world impact.

Technical Skills

Algorithms: Data Visualization PCA ETL/ELT Pipelines Optimization Web Scraping

Cloud (AWS): EC2 IAM Lambda RDS S3 Data Analytics: **Matplotlib** Numpy **Statistics SPSS TDA** TensorFlow **Data Science:** Keras **Pandas** PyTorch scikit-learn

Organzation: Agile Documentation GitHub Jira Workflow Automation

Platforms: Anaconda Docker JupyterHub Ubuntu Linux Windows

Programming: Java JavaScript MATLAB Python R

Professional Experience

Cal Poly Digital Transformation Hub (AWS Partner) Junior Data Scientist Jun 2022—May 2023

Participated in tackling public sector development projects, integrating Python, APIs, and cloud-based AWS resources
San Bernadino County Snowplow Web Application

Developed an application that plans routes for and tracks the location of up to 100 snowplow routes in real-time

- · Completed 30 hours of AWS training for administering EC2, IAM, RDS, S3, and other resources using AWS console
- Developed 5 mathematical algorithm scripts that tabulate on-demand geospatial analytics to optimize route traversal **World Bank Chat-Bot**

Designed an AWS Kendra-powered chatbot service, improving loan seekers' plans for projects with crucial analytics

- · Constructed scalable ETL data pipeline in Python, utilizing Boto3, World Bank API, and Amazon's "Best Practices"
- Cleaned, processed, and stored over 1,000 distinct World Bank documents in S3

California Polytechnic State University, San Luis Obispo

Teaching Associate

Jan 2024-Jun 2024

Instructed college-level mathematics courses to over 70 students with diverse mathematical backgrounds

- Utilized diverse teaching styles and techniques to maximize engagement and attain a pass rate of above 90%
- · Achieved a perfect cumulative median evaluation rating of 5 out of 5, underscoring excellence in teaching ability

Supplementary Workshop Facilitator, Senior Leader

Mar 2020—Dec 2023

Developed, facilitated, and supervised 4 weekly workshops for lower-division mathematics courses

- Devised and led cooperative learning activities for 100+ students, securing over a 90% pass rate across every course
- Conducted frequent audits and supervised over 30 workshops, achieving student engagement levels of 100%

Data Science Strategic Research Initiative Fellow

Mar 2022—Jun 2022

Optimized stem cell model for memory efficiency in Python, implementing sophisticated 10,000+ cell communication

- Collaborated to incorporate a diffusion gradient, generating life-like spatial distributions of over 1,000 morphogens
- · Created a grant proposal to the National Science Foundation

Frost Research Fellow

Jun 2021—Dec 2021

Designed an agent-based model that simulates the environmental development patterns of over 1,000 stem cells

- Utilized Topological Data Analysis to quantify patterns in spatial data from over 100 lab images of stem cells
- Presented findings at the American Medical Informatics Association 2022 Informatics Summit to over 600 attendees

Education

California Polytechnic State University, San Luis Obispo, CA

Master of Science (M.S.) Major: Mathematics Specialization: Applied Mathematics GPA 3.55

Master's Thesis: Representation Theory Arising from Groups in Physics

Bachelor of Science (B.S.) Major: Mathematics Concentration/Minor: Computer Science GPA 3.30

Senior Project: Topological Data Analysis of Embryonic Pluripotent Stem Cells

Awards

Donald and Diane Jackson Scholarship in Honor of Clyde P. Fisher Frost Undergraduate Research Award (William and Linda Frost Fund) Volmar A. and Viola I. Folsom Scholarship 2022

2021

2021