Brittany Dougall

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Professional Profile

Highly self-motivated and results-driven healthcare analyst seeking to apply newly acquired data science skills to the field of machine learning. Experienced in analyzing financial data, measuring return on investment, and collaborating across teams to identify opportunities for improvement in the current strategy.

Education

University of California, Berkeley – Master of Information and Data Science

2022 (anticipated)

Relevant Courses: Applied Machine Learning, Machine Learning at Scale, Natural Language Processing with Deep Learning

University of Washington, Seattle - Bachelor of Science, Biology

2013

Skills

Programming: Python, R, SQL

Visualization: Tableau, Matplotlib, ggplot2

Cloud Computing: Google Cloud Platform, Amazon Web Services, Databricks

Distributed Frameworks: Hadoop, PySpark, MapReduce

Machine Learning and NLP: PyTorch, TensorFlow, neural networks, text classification, sentiment analysis

Projects

Flight Delay Prediction, UC Berkeley MIDS Team Project, Data Scientist

2022

• Trained and tested several machine learning models to predict flight delays, diversions, or cancellations, evaluated the performance of the best performing model (XGBoost Classifier)

TranQuality, UC Berkeley MIDS Team Project, Data Scientist

2021

• Developed a Siamese neural network to assess translation quality for low-resource Indian languages and evaluated its performance

Content Recommender, UC Berkeley MIDS Team Project, Data Analyst

2021

 Cleaned movie feature data and performed PCA dimensionality reduction and feature selection using XGBoost for a content-based recommender system

Experience

McGriff Insurance Services

Irvine, CA

Healthcare Data Analyst

2018 - 2021

- Automated routine data cleaning tasks for quarterly reports with Python, reducing the time to obtain regularly requested client metrics
- Demonstrated lower healthcare costs and utilization for participants compared to eligible non-participants in a digital wellness platform for a pitch to prospective clients
- Projected estimated savings from an employer client's participation in a diabetes reversal program, resulting in the adoption of a new employee health benefit
- Compared changes in biometric markers and chronic disease risk between participants and eligible nonparticipants in a weight management program that we recommended, and the client adopted

Ambry Genetics Aliso Viejo, CA

Clinical Data Curator 2015 – 2018

• Prepared the clinical history and genetic test results of 700+ patients with a personal or family history of Lynch Syndrome cancer and conducted preliminary analysis, resulting in authorship in the *Journal of Clinical Oncology*

- Prepared the clinical history and genetic test results of patients undergoing familial hypercholesterolemia testing for a research study, resulting in authorship in the journal *Circulation*
- Developed data entry standards for cardiac, hematologic, and pulmonary clinical data
- Evaluated patient clinical history to determine eligibility for a breast cancer risk prediction model

Veterans' Administration Seattle, WA

Teledermatology Volunteer Research Assistant

2013 - 2015

- Discovered a discrepancy in the reporting of melanomas by stage to national cancer registries, resulting in expansion of VA Puget Sound reporting methods and primary authorship in the journal *Federal Practitioner*
- Co-developed a Microsoft Access relational database of melanomas diagnosed in a 5-state region over a 6-year period, resulting in authorship on 3 published manuscripts
- Co-wrote a Small Business Innovation Research proposal for using Gigapixel imaging as a method of skin cancer surveillance