

Brian McMurray

DATA SCIENTIST · MACHINE LEARNING ENGINEER

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Education

Northcentral University

PHD IN DATA SCIENCE

GPA: 3.98

April 2021 - May 2024

Western Governor's University

M.S. IN DATA ANALYTICS

2019

Work Experience

County of Sonoma

Santa Rosa, CA

SYSTEMS SOFTWARE ANALYST

Apr. 2019 - Jul. 2021

- Implemented Big Data platforms such as Splunk for central data collection, reports, dashboards, and monitoring.
- Developed ETL pipelines from multiple disparate data sources including external APIs.
- Developed internal automation and reporting tool platform using Ruby on Rails.
- Leveraged Machine Learning (K-Means clustering, isolation forests, DBSCAN) for security access migration project.
- Developed and maintained reports and dashboards using business intelligence platforms including PowerBI and Kibana.
- Worked with multiple teams on large SQL migration project including dependency analysis, compatibility analysis, and migration planning.
- Planned and oversaw projects and implementations with multiple technical teams, vendors, and stakeholders.
- Supervised technical operations team including roles and responsibilities, team training, and day to day operations.
- Developed tools and management platforms to optimize business operations.

County of Sonoma

Santa Rosa, CA

NETWORK SECURITY ENGINEER

Oct. 2014 - Apr. 2019

- Data analysis and reporting for data from multiple security systems.
- Implemented anomaly detection and alerting.
- Designed multiple dashboards and metrics for key stakeholders.

Sonoma County Superior Court

Santa Rosa, CA

SYSTEMS ADMINISTRATOR

Oct. 2008 - Oct. 2014

- Managed and maintained all data center hardware and software systems..

Skills

Technologies Keras, Tensorflow, Scikit-Learn, NumPy, Pandas, PyTorch, NLTK, OpenCV, Jupyter, PowerBI, Splunk

Data Science Data Analysis, Data Visualization, Machine Learning, Modeling, Statistics, Data Mining

Programming Python, R, Javascript, Powershell, Ruby, SAS, LaTeX

Projects

Dynamic Security Group Clustering

County of Sonoma

PYTHON, ISOLATION FORESTS, MCA, DBSCAN

Developed process using machine learning to cluster organization users based on their security group membership to assist in the process of migrating to Role Based Access Control (RBAC). Evaluated multiple unsupervised clustering algorithms.

Big Data System Architecture and Implementation

County of Sonoma

SPLUNK, PYTHON, POWERSHELL, BASH, BIG DATA, SQL

Designed and implemented Splunk platform environment for monitoring, reporting, and dashboarding. Architected data collection sources and methods, including data collection scripts and API integration. Developed multiple ETL pipelines from existing data sources and APIs.

Certifications

SAS SAS Certified Specialist: Base Programming Using SAS 9.4

SAS SAS Certified Statistical Business Analyst Using SAS 9: Regression and Modeling