Murray Keogh

SKILLS & TOOLS

- Python
- pandas | numpy | scipy
- scikit-learn
- Git Version Control
- Machine Learning
- Time Series Analysis

- R
- R Shiny
- Tableau
- Excel
- Data Visualization
- Survival Analysis

- SQL
- Epic EMR
- SAS
- Lean Six Sigma
- Regression Techniques
- Causal Inference

WORK EXPERIENCE

UC San Diego Health System Business Intelligence Specialist

February 2016 - February 2021

- Managed the transition of multiple organizational dashboards from Excel to Tableau, saving 60-80 weekly hours for staff.
- Built novel data sources representing patient flow, environmental services, and nurse staffing. The data sources required complex SQL queries and data ingestion from third party staffing software.
- Developed novel Tableau dashboards, including statistical control charts and time series analysis, used by leaders across multiple departments for daily management and process improvement.
- Developed the Covid-19 Capacity Forecast Dashboard used daily by operational leaders to track census and forecast capacity issues.
- Created census forecasting models to aid senior decision makers on the most optimal way to decrease hospital census in response to planned strike of nursing staff.
- Co-designed and implemented a hospital command center in the Patient Flow and Capacity Management department. Results included an hour decrease in bed turnover time and a 5% increase in daily discharges.
- Managed process improvement project to decrease the average length of stay in Bone Marrow Transplant patient population. A new admission process was created, resulting in a length of stay decrease of 1.3 days.

Verizon Wireless Junior Data Scientist

August 2014 - December 2015

- Supported and improved predictive models used in churn management, leading to industry leading low churn rate.
- Created segmented customer profiles of churned accounts leading to increased customer intelligence and more effective, targeted marketing retention campaigns.

EDUCATION

University of New South Wales, School of Medicine

Master of Science, Health Data Science

Sydney, NSW

Thesis: Causal Inference Methods to Evaluate Multiple Programs in the Child

Expected August 2021

Protection Service System

Cornell University, College of Engineering

Bachelor of Science, Operations Research Engineering

2014

Ithaca, NY May

CERTIFICATIONS

Lean Six Sigma Black Belt, UC San Diego Extension

October 2016