

Kelly Quan
San Diego, CA 92117
858.380.8542 kelsoquan@gmail.com

Education

Master of Science Statistics

San Diego State University, San Diego, CA

May 2019

GPA: 3.21

Bachelor of Science in Mathematics

California State University Chico, Chico, CA

Dec 2017

GPA: 3.00

Work History

Math/Statistics Tutor

CSU, Chico Student Learning Center

Chico, CA

Aug 2016-May 2017

Tutored 15 hours a week during the semester as a full-time student.

Military Police

National Guard

Sacramento, CA

Jun 2012 – Dec 2017

Secret Clearance

Utilized quick problem-solving skill and techniques to manage high stress dangerous situations

Assessed safety, medical, and psychiatric state of citizens

Counseled and provide resources to victims

Electrician Apprentice

IBEW Local 569

San Diego, CA

May 2011- Jun 2012

Projects

Prediction of Precipitation of the Contiguous US based on Temperatures of the Western US.

Research: Using data collected by NOAA, I am trying to find correlations between the temperatures of the Western US states and the precipitation of the rest of the country. Methods used: Conical Correlation Analysis, Principal Component Analysis, Empirical Orthogonal Functions.

Titleist's Brand-New Golf Balls

Case Study: A golf course cleaning company decided to see if it was possible to resell used Titleist golf balls as new balls. The company would wash or refurbish balls and sell them as new. Titleist filed a lawsuit against the golf course cleaning company. Analysis of differences between new and refurbished balls was used to settle lawsuit.

New York Municipality Expenditures

Predicted expenditures for the towns, Warwick and Monroe, for the years 1995, 2005, 2025. The data set had 916 towns with various covariates. Used a log-log transformation for the predictions.

Prostate Capsule Penetration vs Prostate Cancer

Predicted the odds and probabilities of having prostate capsule penetrated from baseline exam results.

Logistic Regression Videos

Made videos on Logistic Regression on the Iris data set. Removed one type of iris and tried to predict the odds of which flower species it was.

Central Limit Theorem Exploration

Hypothesize CLT situations, test hypotheses, and report findings.

Population Size Estimation

Used simulations in RStudio to compare tree population sizes in a plantation to determine estimation bias for different combinations of population, sample, and plot size.

Pursuit of Happiness: Multivariate Approach

Analysis of 155 countries to judge and measure happiness around the world during the years 2015-2017.

Principal Component, Factor, and Cluster Analysis.

Skills

Advanced: R/R Studio, statistical modelling, data visualization,

Intermediate: recording (YouTube) videos, interpersonal communication, data transformation, reports and presentations

Basic: SAS, Latex, C, C++, Mathematica, LaTeX, Java, Python, data cleaning

Volunteer/School Activities

IBEW 569, CSUC Math Club, CSUC Chess Club, CSUC Student Veterans Organization, KCSC Campus Radio, SDSU AI club

Club Positions

VP and Senator of Math Club, DJ on the Campus Radio, Treasurer of Chess Club, Secretary of SVO

Awards/Scholarships

Pi Mu Epsilon Math Honor Society, SVO Salute Honor Society, Sigma Alpha Pi National Society of Leadership and Success