

# Kelso Quan

Panama City Beach, FL — kelsoquan@gmail.com — (858) 380-8542 — linkedin.com/in/kelsoquan — USA Citizen

## EXPERIENCE

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### Scientist (ND-3/GS-12)

US Navy NAVSEA NSWC Panama City Division

Panama City, FL

July 2023 - Present

- Secret Clearance
- Research in Hydro Autonomous Robotics. In the Ubuntu environment, built containers and images using podman and docker. *ROS, Python, C++*
- Research for Hall Roaming Robot: Ros2 tutorials. Conducted inventory of 4 robots valued at \$2000 each. Was Scrum Master for a week. Filled in as Product Owner and Principal Investigator for a Biweekly Sprint Meeting to delegate tasks for the next 2 weeks. *ROS, Python*

### Data Analyst (GS-12)

Decision Technologies Inc

Virginia Beach, VA

May 2019 - July 2022

- Secret Clearance
- Conducted a deep dive analysis into one of the air search radar systems to modify, correct, and eliminate existing parts for a field change.
- Measured and reported reliability, availability, and maintainability across 5 Naval radar systems (surface and air search) and 9 variants to improve Naval Fleet and individual ships' readiness on a quarterly basis.
- Lead projects on 2 USMC Radar RAM metrics. One radar project from inception.
- Measured and reported reliability, availability, and maintainability on 2 USMC radar systems to include its air and ground variants to support the ISEA and the units' readiness monthly. My monthly reports end up on the Secretary of the Navy's desk. *OPUS10*
- Analyzed Lowest Replaceable Units (LRUs) reliability on an USMC radar system to determine cost effectiveness of an upgrade versus spare availability. Report goes to the Assistant Secretary of the Navy. Lead on this project.
- Traveled to Quantico, Port Hueneme, CA, New Albany, IN, and Washington, DC to brief and present findings and analysis to my clients' superiors and program managers.
- Traveled to White Sands, NM to collect, convert/reduce, and analyze classified USMC radar data.
- Presented findings and analysis in Quarterly Progress Reports (QPR) to all peoples involved in the radar systems including RAM metrics.
- Observed radar training classes (with an estimated annual budget of 200K) to discover weaknesses and produce possible improvements for the Sailors, instructors, and training program. *RStudio*

## EDUCATION

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### Masters of Financial Mathematics

Florida State University, Tallahassee, FL

GPA: 3.20

May 2023

### Masters of Statistics

San Diego State University, San Diego, CA

GPA: 3.25

Dec 2020

## PROJECTS

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### Prostate Capsule Penetration vs Prostate Cancer: Predicting Cancer Tumors

Project Link: <https://www.rebellionresearch.com/predicting-cancer-tumor-growth>

San Diego, CA

May 2019

- Predicted the odds and probabilities of having prostate capsule penetrated from baseline exam results. Published on Rebellion Research Website. *RStudio*

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

- Research: Used data collected by NOAA and found correlations between the temperatures of the Western US states and the precipitation of the rest of the country. Methods used: Canonical Correlation Analysis, Principal Component Analysis, Empirical Orthogonal Functions, Longitudinal Data. *RStudio*

## SKILLS

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- **Relevant Coursework:** Measure Theory, Financial Engineering I & II, PDE, Foundations of Computational Mathematics I & II, Investment Management and Analysis, Financial Derivatives and Risk Management, Stochastic Analysis, Stochastic Computations and Optimization, and Monte Carlo Methods. Real Analysis, Time Series Analysis, Regression Analysis, Advanced Mathematical Statistics, Multivariate Analysis, Statistical Consulting, Statistical Communication, Data Mining, Actuarial Modelling.
- **Programming:** SAS, C, C++, Mathematica, Java, Shell Scripting, Julia, Python.
- **Software:** Latex, OPUS10, SIMLOX,
- **Communication and Data:** recording (YouTube) videos, interpersonal communication, reports and presentations/briefs, data transformation, statistical modelling, data visualization