

## EDUCATION

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**University of California Santa Barbara** – Masters in Data Science (Expected 2024), Ph.D. candidate

**Lebanese University** – Masters in Statistics (Biostatistics).

**Lebanese University** – BS in Applied Mathematics.

## PROFESSIONAL EXPERIENCE

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### **Wireless 20/20 - Fiber & Broadband Consulting**

Remote – New York

*Data Scientist II – R, Python, C Sharp, SQL, Squirrel, QGIS, ArcGIS Pro*

Jan 2022 – Present

- **Project Management:** Initiated and executed original project on ArcGIS, provided comprehensive supporting documents, proof of concept, and formal proposal.
- **Visualization:** Strategically created a squirrel dashboard for multiple providers across different counties, integrating speed of internet and federal grants data.
- **Automation:** Optimized and automated the fiber mile counting process for grant applications using smart funding approaches, map-based tools, and risk checks, achieving a 500% efficiency improvement and reducing manpower requirements from 5 employees to 1.
- **Machine Learning:** Applied DBSCAN for geospatial analysis to cluster data points, effectively identifying key regions more likely to adopt new services. This targeted approach directly contributed to securing a \$1M contract with a client for one year.
- **Geospatial Analytics:** Conducted in-depth spatial data analysis using GIS tools and statistical modeling, managed geospatial databases for streamlined data retrieval, and implemented customized routing algorithms to optimize logistics and resource allocation.

### **University of California Santa Barbara**

Santa Barbara, CA

*Teaching Assistant – R, Python, SQL*

Sept 2022 – present

- **Educational Leadership:** Facilitated hands-on learning in "Transition to Data Science," teaching students Python-based data analysis techniques for real-world applications.
- **Curriculum Development:** Devised and taught course material for "Probability and Statistics," simplifying high-dimensional probability and various statistical testing methods.
- **Instructional Innovation:** Spearheaded an engaging approach to "Survival Analysis," breaking down complex models into easily understandable concepts.

*Data Scientist – R, Python, SAS, SQL, Tableau*

Oct 2019 - Oct 2021

- **Visualization:** Compiled and presented infection and vaccination data into Tableau for strategic visualization for executive committee team.
- **Stochastic Process:** I revamped the COVID-19 vaccination process in Beirut using queueing theory, cutting down wait times and vaccinating more people. (Manuscript in Preparation)

*Data Analyst – R, Python, SQL, Tableau*

Feb 2018 – Nov 2018

- **Visualization:** Employed Tableau to transform and visualize complex financial and product data, thereby aiding in executive decision-making processes
- **Fraud Detection:** Designed and implemented a sophisticated fraud detection system to successfully identify and halt fraudulent orders, safeguarding company assets.

## **Skills:**

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**Visualization:** Tableau, R (ggplot2, plotly, Shiny, flexdashboard), Python (matplotlib, plotly), Excel, Power BI, Squirrel

**Analytics:** Regression, Classification, Spatial, Network, Time Series Modeling, Segmentation, Visualization, Simulation

**Software:** R, Python, SQL, Tableau, Excel, Jupyter Notebooks, C Sharp

**Machine Learning:** TensorFlow, Neural Network, Random Forest, K-NN, Linear Regression, PCA, Stepwise Regression, Ridge Regression, Decision Tree, Logistic Regression, Time Series, Clustering: Hierarchical/K-Means, General Linear Models

**GIS:** ArcGIS Pro, QGIS, ArcPy, Image Interpretation, OpenLayers, Google Earth Pro, PostGIS