

**Elmer Camargo**  
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## **EXPERIENCE**

### **Data Scientist, LA County Department of Public Health**

Apr 2021 – Present

Implemented a county COVID19 vaccination data pipeline product using Python and SQL for division, department, and countywide stakeholders and developed insights into business problems and new information through the work of exploratory analysis and data mining.

Worked with functional teams to develop and maintain the interactive data visualizations on the public data dashboard website and used software testing techniques to create a reporting system to verify data quality assurance and site functionality using Python, and REST API fundamentals.

Used Python to connect and migrate data from Snowflake databases to internal PostgreSQL databases and used various database constraints and normalization techniques to maintain database integrity. Additionally, used JavaScript and D3 libraries to visualize findings from said internal database via the [Los Angeles County Department of Public Health COVID-19 Vaccination Dashboard](#).

### **Data Scientist, I-Team City of Los Angeles**

Dec 2020 - Apr 2021

Developed an internal COVID19 dashboard for the mayor's office tracking cases, hospitalizations, deaths, and vaccination trends highlighting key timelines related to the Notify LA Program and presented key insights to support business decisions and allocate resources using R and Tableau.

Collaborated with countywide stakeholders to solicit, define, and manage the Geospatial Clustering data science project, which used the Auto Classification Algorithm of k-means clustering with unstructured NoSQL based Contact Tracing survey data.

Maintained and developed Python codebase to connect to Google Cloud Platform resources to update SQL databases that fed into internal Mayoral Office Tableau dashboards and collaborated with decision makers to create actionable tasks to allocate resources to communities in need.

### **Data Analyst, Chapman Argyros School of Business and Economics**

Aug 2020 – Apr 2021

Analyzed indications of multi-dimensional poverty and sustainable development goal achievement for the Sahel region of Africa by designing and implementing a spatial database via NoSQL cloud storage combining population and settlement estimates from unstructured remote sensing platforms, structured open street map data and humanitarian exchange data.

Visualized deep learning convolutional neural network estimates presented to the Interamerican Development Bank to identify potential geographic locations in need for financial resources using SQL and R and Tableau.

### **Data Analyst, Chapman University Crean College of Health and Behavioral Sciences**

Aug 2019 – Apr 2021

Mapped and analyzed data related to multiple projects revolved around crimes in vicinity of legal drug outlets, crimes in vicinity of parks, elementary school lunch programs, transportation hotspots, and COVID19 outbreaks.

Used SQL and R to run ANOVA testing, significance testing, linear regressions, logistic regressions, forecasting models on projects related to above projects.

## **Software Engineer, Northrop Grumman**

Summer 2019

Developed and maintained proprietary flight simulation and pilot training software using programming standards to adhere to near real time requirements and used automated testing technologies to test production code.

Implemented software unit tests in C++ using the Google Testing Framework for source files to track and detail project success and failure rates. Files being tested ranged from establishing UDP and TCP server connections, linking libraries, and bit manipulation.

Participated in Agile-Scrum sprint planning sessions and used the Atlassian Jira software to track progress on stories assigned.

## **Data Collections Manager, United States Marine Corps**

2015 - 2017

Managed the use of departmental data collection resources and technologies by collaborating with stakeholders to validate and develop information requirements and consulting them on topics such as integration and retention techniques for the structured and unstructured data provided by departmental data collection resources and technologies.

Worked on an 8-person geospatial technical team utilizing Agile-Scrum project management techniques to schedule and satisfy collection requests for the Marine Pacific detachment consisting of 35,000 to 55,000 personnel.

Conducted customer interviews to develop story tasks and expectations used to construct collection plans that fed into over 100 validated and satisfied geospatial products. Additionally, served as a mediator at over 200 meetings between customers and third-party technical teams to establish transparent relationships that allowed for comfortable and structured communication.

## **Data Analyst, United States Marine Corps**

2012 – 2014

Conveyed analytical findings and conclusions of work to the regional executive officer, technical staff, and non-technical staff through oral presentations using interactive tools and worked with program staff to implement actionable and data supported business processes to retain fidelity in said analysis.

Used Excel and PowerPoint to present weekly presentations to executive staff of changes in the operational environment and monthly forecasts for potential issues within the strategic environment.

## **EDUCATION**

USC, Marshall School of Business + Viterbi School of Engineering, Los Angeles, CA      May 2024  
MS Systems Engineering + MBA

Chapman University, Fowler School of Engineering, Orange, CA      Feb 2021  
BS Data Analytics

*Relevant Coursework:* Data Structures and Algorithms, Statistical Modeling, Data Science, Introduction to Machine Learning, Applied Analytics, Database Management Systems, CPSC I&II

## **HONORS AND GRANTS**

MIT/Harvard Warrior Scholar Program (2017)  
Thurgood Marshall Scholar Grant (2018-2021)  
Chapman Grant (2018-2021)

## **PRESENTATIONS, PUBLICATIONS, MENTIONS**

The Student Symposium, Orange, CA, November 2020. “Geo-scraping South Los Angeles” (Poster).

Sera, J., Pena, E. C., Lounsbury, O., & Douglas, J. (2020, July). Examining spatiotemporal associations between legal drug outlets and crime and violence. In psychosomatic medicine (Vol. 82, No. 6, pp. A88-A88). (Abstract Publication)

Douglas, J, Subica, A. (2020, DEC) COVID-19 treatment resource disparities and social disadvantage in New York City. In Preventive Medicine. (Vol 141) (Acknowledgement)

Hersh, J. (2021, JUL) Where are the Unbanked in Belize?: Using Machine Learning Small Area Estimation to Improve Financial Inclusion Geographic Targeting. In IADB Publications.

## **CERTIFICATIONS**

NGA Geospatial Intelligence Requirements Management  
NGA Intermediate Intelligence Writing  
USPACOM Critical Thinking and Structured Analytical Techniques  
USPACOM Intelligence, Surveillance, Reconnaissance & Collection Management  
DIA Intro to Business Intelligence  
DOD Intelligence and Effective Writing Certification  
Lean Six Sigma Yellow Belt

## **TECHNICAL SKILLS**

Python, R, SQL, NoSQL, CQL, GraphQL, NodeJS, Web Development, C++, Java, C#, Postgres, MySQL, Redis, docker, git, bash, linux, vdi, ArcGIS Suite, Google Earth Engine, QGIS, Github Actions, Jenkins, Tableau, Power BI, Asana, Airtable, Trello, Microsoft Office, Atlassian Development Toolset, Jira, Slack, Visio, Mermaid.JS