

# William Lonon

## Data Scientist

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My Website + Github

## Education

University of Arkansas Honors College:

*B.S. in Data Science and Computational Analytics*

May 2026

GPA: 3.95

## Job Experience

**Experiential Learning Supervisor:** University of Arkansas  
(June 2025 - present)

- Managed a state-of-the-art data visualization lab
- Designed inventory tracking and patron training databases
- Developed 6+ workshops to showcase technologies for hundreds of patrons
- Trained dozens of employees and patrons on library systems, AR, VR, data visualization, video, and music production equipment.

**Production Operations and QC:** MAKR Studio

(May - August 2024)

- Reduced misprint, miscuts, returns, poor reviews, and waste rate.
- Found and eliminated key defects causing the majority of product refunds.
- Increased production efficiency through workflow optimization.

## Data Science Projects

### Machine Learning Crime Prediction

Python, SKLearn

- Built a geospatial ML system to predict crime likelihood and detect hotspot regions across San Francisco.
- Applied clustering and classification to model temporal and spatial patterns (predictions 8x more accurate than random choice).
- Delivered insights relevant to resource allocation and urban planning.

### Custom Data Analysis Suite

Python

- Created a terminal-based data analysis program in Python from scratch
- Implemented PCA, linear/logistic regression, and random forest modeling
- Engineered utilities for one-hot encoding, regression plotting, and custom feature selection.

### Tour Band Optimization

Python, Pyomo

- Built a highly parameterized interactive system based on custom TSP
- Automatically computes the optimal tour for a travelling band
- Considers popularity, budget, location, and time constraints

### Interactive Visual Dashboard for COVID-19

Tableau, Python

- Created multiple interactive dashboards in Tableau
- Displayed infection, hospitalization, death, and comorbidity rates.
- Cleaned unfathomably dirty data

## Skills

**Machine Learning:** Nuanced knowledge of neural networks, algorithms, use cases, and optimization methods

**Programming Languages:** Python, R, SQL, Java, JavaScript, HTML

**Interactive Data Visuals:** Fluent in Tableau, PowerBI, can code custom dashboards

**Optimization:** Pyomo, Linear & Integer Programming, Constraint-based modeling

**Data Engineering & Analysis:** Data cleaning, General statistical analysis, transformations, feature engineering

**Databases:** MySQL, NoSQL, Normalized database design

**Cloud & Big Data Tools:** AWS, Databricks, Posit, Google Cloud

**Algorithms:** MLPs, CNNs, RNNs, KNN, DBSCAN, K-Means, PCA, Decision Trees, Ensemble Methods, UCS, DFS, BFS, A\*, SVM, linear, lasso, ridge, and logistic regressions

## Awards

- Summa Cum Laude Honors
- Employee of the Month (EL Supervisor)
- Chancellor's and Dean's List
- Chancellor's Community Scholarship
- Charles D. Brock Endowed Scholarship