

ELIZABETH FRANK

Boca Raton, Florida 33486
EMFrank117@gmail.com

<https://linkedin.com/in/elizabethmattisonfrank>
<https://github.com/emfrank117>

OBJECTIVE

Data-driven professional with hands-on experience in data science projects, currently pursuing a Master's in Applied Data Science. Seeking an internship to leverage analytical skills and contribute to impactful projects while gaining experience.

EDUCATION

Master of Science in Applied Data Science,
Syracuse University, currently enrolled.
Applied Data Science Program: Leveraging AI for Effective
Decision-Making, MIT Professional Education
Insect Pathology, Cornell University, Ithaca, New York
Bachelor of Science in Conservation, Kent State University,
Kent, Ohio

COURSE WORK

Introduction to Data Science & Business Analytics
Quantitative Reasoning in Data Science
Data Administration Concepts and Database Management
Azure, Tableau, Google Analytics, & Power BI
Data Analysis & Visualization
Machine Learning & Deep Learning
Generative AI & Time Series and Forecasting

PROJECTS

Precipitation Prediction in Australia

Developed a predictive classification model for rain tomorrow utilizing a decade's worth of historical weather data.

- **Data Processing & Analysis:** Conducted extensive exploratory analysis and visualization on a decade of weather data, applying rigorous data cleaning across multiple stations.
- **Modeling & Evaluation:** Utilized Support Vector Machine (SVM) with K-fold cross-validation and Random Forest to achieve high predictive accuracy, comparable to local meteorological forecasting.

Cars4U Used Car Price Prediction

Built a dynamic pricing model for a start-up's used vehicle inventory.

- **Data Engineering:** Cleaned and visualized vehicle data, highlighting patterns for model optimization.
- **Machine Learning Models:** Implemented Linear Regression with Lasso and Ridge regularization, Random Forest, and XGBoost, tuning hyperparameters for accuracy. Incorporated a differential pricing strategy tailored to locality and demographic factors.

Boston House Price Prediction

Predicted housing prices to support data-driven decision-making.

- **Exploratory Analysis & Modeling:** Conducted comprehensive data analysis and developed a multiple linear regression model, delivering actionable insights and recommendations.

PROFESSIONAL EXPERIENCE

Onboarding Specialist and Data Science Consulting

NuLogic Business Solutions | 2024-Present

Specialized in healthcare agent onboarding and consulting for data-driven staffing solutions.

- **Data Collection & Management:** Consulted on best practices for candidate data collection, building systems to streamline agent data capture and optimize data utilization for analysis.
- **Data Analysis & Trend Identification:** Analyzed historical Annual Enrollment Period (AEP) data to identify trends in placement success and pre-hire dispositions, enhancing recruitment strategies for major clients including Humana, United Healthcare, Kaiser Permanente, Aetna, and Medicare.
- **Process Optimization:** Managed onboarding for licensed healthcare agents during peak enrollment, efficiently processing high-volume staffing requirements for multiple large-scale insurance carriers.

Senior Biological Science Technician

U.S. Department of Agriculture, Agricultural Research Service, Invasive Plant Research Laboratory | 2006-2021

Experienced in biological control systems, data analysis, and project management within research settings.

- **Research & Data Analysis:** Led large-scale biological control projects, including experimental design, data collection, and analysis. Effectively managed data interpretation and presentation for federal permitting, publication, and stakeholder reporting.
- **Project Management:** Conceptualized project goals, established logical progression, and made data-driven decisions to achieve research objectives. Collaborated with interdisciplinary teams and managed project resources.
- **Training & Leadership:** Supervised and trained lab and field technicians in various environments, including federal quarantine facilities, ensuring compliance and safety standards.
- **Operations & Outreach:** Managed purchasing for facility division and contributed to safety and environmental initiatives. Conducted facility tours and open houses, enhancing public and professional engagement.

Full list of [Publications](#)

TECHNICAL SKILLS

- R, SQL, Python (NumPy, Pandas, Scikit-Learn, Seaborn, Matplotlib, NetworkX, TensorFlow, Keras) •
- Azure, Access, Excel • Microsoft, Mac OS • SPSS, SAS, Sigma Plot •