# Yunmei Zheng

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#### **WORK EXPERIENCE**

Electrical Engineering Intern

June - August 2022

# Syska Hennessy Group

Manhattan, NY

- Performed detailed analytics on airport design data, transforming complex technical details into intuitive Excel charts and PowerPoint visualization
- Collaborated closely with interdisciplinary engineering teams and external contractors across 5+ projects, ensuring smooth coordination and maintaining a 100% on-time project delivery record
- Developed and maintained databases for electrical equipment, streamlining data retrieval and contributing to the
  efficiency of maintenance procedures
- Managed data entry for lights and wires using Excel, ensuring accurate and organized documentation, maintaining data integrity and accessibility

## **EDUCATION**

**COOP** | Data Analytics Apprenticeship

August 2023 - Present

 Participating in a 16-week data analysis apprenticeship with a focus on mastering SQL, Python, and Tableau for data processing, visualization, and storytelling, while also committing to ongoing professional development

University at Buffalo | Bachelor of Science, Engineering Science

May 2023

 Courses: Applied Probability and Statistics, Introduction To Data Science, Statistics for Engineers, Engineering Computations, Analytics and Computing, Machine Learning and Society

### **TECHNICAL SKILLS & CERTIFICATION**

Languages: R | MATLAB | Python | SQL | HTML | CSS | JavaScript

**Certification:** Google Analytics Professional (Coursera) | Oracle Cloud Data Management (Oracle)

# **PROJECTS**

Solving Literary Puzzle | Python | <a href="https://github.com/yun-mei/Cain\_Jaw">https://github.com/yun-mei/Cain\_Jaw</a>

May 2023- May 2023

- Employed NLP techniques to uncover 'Cain's Jawbone' puzzle by Edward Powys Mathers, involving the analysis of random 100 pages of text
- Leveraged part-of-speech tagging, named entity recognition, and sentiment analysis to gain insights into characters, themes, and events, resulting in a coherent narrative structure
- Analyzed word associations across pages to unravel the puzzle's complexities and create a structured interpretation
  of the content

Flow Layout | Excel, Python | <a href="https://yun-mei.github.io/assets/pdf/flow.pdf">https://yun-mei.github.io/assets/pdf/flow.pdf</a>

*March - May 2023* 

- Employed creative problem-solving skills to optimize department configurations, resulting in a 3% reduction in production costs and improved workflow efficiency.
- Employed the Direct Clustering Algorithm and CRAFT to strategically optimize 11 different departments, improving resource allocation and operational effectiveness
- Created a Mixed Integer Programming model with the aim of minimizing transportation costs and enhancing workflow, enabling cost-efficient logistics and smoother processes

Air Quality in NYC | R, RShiny | https://yun-mei.github.io/assets/pdf/NYCpd.pdf August - December 2022

- Designed 15 interactive charts and graphs using ggplot2 to enable intuitive exploration with RShiny, effectively communicated findings and insights through clear documentation and presentations.
- Formulated regression and clustering models aimed at predicting pollution levels across NYC neighborhoods, providing valuable insights into environmental trends, which were utilized to make predictions for 50+ different neighborhoods
- Improved model hyperparameters, resulting in a significant increase in prediction accuracy to 70%, strengthening the reliability of pollution forecasts