

BOWEN YAO

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EDUCATION

Master of Science in Business Analytics, Rady School of Management
University of California, San Diego, CA
GPA: 3.622/4.000

12/2025

Bachelor of Science in Business Analytics and Information Technology
Rutgers University, New Brunswick, NJ, US
Major: Business Analytics and Information Technology.
Concentration: Professional Selling.

05/2024

EXPERIENCE

AI Research Intern, BON Corporation (Beijing-intelligence of Oriental Nations),
Beijing

05/2024 - 08/2024

Computer Vision for Gravel Spill Detection in Factory Logistics

- Led a team in utilizing Labelling for image annotation and implementing three data augmentation techniques, ensuring high-quality dataset preparation for model training.
- Trained a YOLOv8 model to detect gravel spills from trucks at factory entrances/exits, achieving over 80% detection accuracy and enhancing monitoring efficiency for factory logistics by 40%.
- Converted the trained YOLO model to ONNX format for deployment and integration.

Research Assistant, Remote RA to Prof. Yongyi Mao, University of Ottawa, Remote

09/2022 - 12/2023

Research on Serial Algorithm for Comparing DNA Biostatistical Information Based on Shared Memory

- Developed a Python-based approach to segment biological sequences and assign to virtual ants for sequence alignment.
- Designed a state transition matrix and rules to model relationships between alignment results, character matching, and spaces.
- Conducted global sequence comparison using the Needleman-Wunsch and SA-ACO algorithms, merging fragment alignments to enhance efficiency and accuracy.
- Published paper in the Proceedings of the 2023 IEEE 5th Eurasia Conference on IoT, Communication, and Engineering.

Data Analyst Intern, BON Corporation (Beijing-intelligence of Oriental Nations
Co., Ltd.), Beijing

05/2023 - 08/2023

Precision Marketing for the TikTok directed Data Package for China Unicom

- Processed 500 samples using the SVM algorithm, selected 26 attributes related to package from 1200 user tags based on user attribute correlation analysis, and narrowed down to 13 attributes through Pearson correlation.
- Applied the Tensorflow framework in Python for model construction and the Gaussian kernel function for data training and backed up model evaluation and verification with F-Fold cross-validation.
- Reduced data noise by refining 2,000 samples and improving model accuracy by 18%. Applied the Pareto principle to optimize data distribution, increasing targeting effectiveness by 23%.
- Developed targeted advertising placement strategies based on segmentation, increasing marketing conversion rates by 4%.

PROJECTS

- Led a team in analyzing COVID-19 data from JHU and CDC to visualize infection trends across U.S. counties. And constructed an interactive heatmap to track the spread of infections and assess vaccine effectiveness.
- Create a logistic regression model to predict future outbreaks, achieving 88% accuracy on the test set.

SPECIALIZED SKILLS

- Skilled in using JavaScript, Java, R, Python, SQL, Excel PivotTable for data mining, analysis, and visualization.
- Familiar with machine learning algorithms like Support Vector Machine (SVM), Decision Tree with its Ensemble Methods, Naive Bayes, and K-Nearest Neighbors.