

SEONGYEON (YEONIE) HEO

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EDUCATION

New York University

B.S in Computer Science | GPA: 3.76/4.0

Related Coursework: Applied Machine Learning, Algorithms, Textual Analysis, Natural Language Processing

Abu Dhabi, New York

Aug. 2020 – May 2024

EXPERIENCE

TikTok (ByteDance)

Data Analyst

Dubai, UAE

Aug. 2024 – Present

- Developed a statistical model from scratch in Python for forecasting catering attendance with 95% accuracy, significantly reducing waste from 30-40% to 5%..
- Managed AA/AB testing of product (internal tools) features from ideation to post-launch, assessing impacts on usability and user decision-making.
- Identified major cost drivers of business travel through data analysis and directly influenced product development to drive cost-saving behavior, saving ~5% of total travel cost.
- Collaborated with Admin and Operations to generate detailed reports on workplace amenities such as catering, parking, and travel services. Responsible for creating, validating datasets in SQL and visualizations in Tableau.

Product Analyst Intern

June 2023 – June 2024

- Automated the discovery of new business opportunities for TikTok clients using a machine learning RFM-based clustering framework, reducing manual analysis by 80%.
- Transformed manual CPG client success tracking into a real-time, automated dashboard.
- Forecasted TikTok's 2024 revenue with high granularity, aided establishments of precise business targets.
- Renovated the product analytics master dashboard, ensuring consistency in revenue insights and facilitating a streamlined bi-weekly/quarterly business review process.

New York University

Machine Learning Researcher

Abu Dhabi, UAE

Apr. 2023 – Sep. 2023

- Engineered a smart healthcare solution to enhance care for Alzheimer's patients using generative AI, including LLM, a voice synthesizer, and animated avatars, in Python.
- Authored and published a research paper at ML4H 2023 Research Conference. (Recipient of \$1,000 grant)

New York University

Computational Social Science Researcher

Abu Dhabi, UAE

Apr. 2022 – Aug. 2022

- Extracted and classified 2,000+ movie scripts, details on success performance, and production crew lists from 9 movie websites in Python, preprocessing the data for sophisticated time-series analysis.
- Applied topic modeling techniques to explore how movie content has evolved over time and its indirect effects on Oscar-winning probabilities.

PERSONAL PROJECTS

[MemoryCompanion](#): digital health tool for Alzheimer's disease (AD) patients using generative AI

[Political Preference Prediction Model](#): machine learning research paper that predicts political views of tweets

[Oscar-Winning Film Trend Overview](#): text-data analysis on shifts of Oscar-winning films content over time

[Recipe Grandma](#): mobile app that recommends a recipe based on users' available ingredients

SKILLS

Programming Languages: Python, SQL, Hive, Spark, R, TensorFlow, CSS/HTML

Tools: Tableau, MS-Excel, Figma, Google Analytics