SEONGYEON (YEONIE) HEO

+971 50 210 0439 | sh5874@nyu.edu | LinkedIn | Portfolio

EDUCATION

New York University   *Abu Dhabi*, UAE | *New York*, USA
B.S in Computer Science | GPA: 3.76/4.0   Aug. 2020 – May 2024
  Related Coursework: Applied Machine Learning, Textual Analysis, Natural Language Processing, Data Structures

EXPERIENCE

TikTok (ByteDance)   *Dubai*, UAE
Data Analyst   Aug. 2024 – Present
- Developed a statistical model from scratch in Python for forecasting catering attendance with 95% accuracy, significantly reducing waste by 30-40%.
- 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   *Abu Dhabi*, UAE
Machine Learning Research Assistant   Apr. 2023 – Sep. 2023
- Engineered an integrated smart healthcare solution to enhance care for Alzheimer's patients, composed of LLM, a voice synthesizer, and animated avatars, in Python.
- Presented a published research paper at ML4H 2023 Research Conference, QUWA, NYU AI Workshop.

New York University   *Abu Dhabi*, UAE
Computational Social Science Research Assistant   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, MongoDB