JACKY SEO

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PROFILE

I am a Statistics graduate with expertise in data analysis, statistical modeling, and research. Proficient in Python, R, and SAS, I have applied advanced statistical techniques to projects like multivariate analysis and time series modeling. Currently, I am expanding my expertise in AI through SK Group's intensive training program. My research interests include Bayesian methods and their applications in AI-driven statistical modeling. I aim to contribute to statistical science through innovative research during my Master's at the University of Toronto, ultimately aspiring to academia as a professor.

EDUCATION

Bachelor of Science in Statistics (Jun 2024, Final Semester GPA: 3.44, Full-time load) Simon Fraser University, Burnaby, BC, Canada

 Relevant Courses: Applied Linear Algebra, Calculus, Probability and Statistics, Data Science, Mathematical Statistics, Statistical Computing and Exploratory Data Analysis, Linear Models in Applied Science, Stochastic Processes, Statistical Analysis of Sample Surveys, Statistical Theory, Statistics Communication, Applied Multivariate Analysis, Applied Time Series Analysis

PROJECTS

Dining Preferences Analysis at SFU (Jan 2024 ~ Apr 2024)

- Description: Conducted a statistical analysis using various statistical methods to examine dining preferences among over 500 SFU students. This analysis identified key trends and provided insights for optimizing campus dining services, focusing on improving student satisfaction and operational efficiency.
- Approach: Led data collection through surveys, processing approximately 5,000 data points. Employed Python with Pandas for data manipulation and Matplotlib for visualizations of consumption patterns. Applied statistical techniques to analyze preference trends and developed customized reports to support data-driven decisionmaking by stakeholders.
- Results: Identified key trends that improved dining service operations, leading to a 15% increase in student engagement. Findings were scalable to larger datasets, highlighting the potential for broader applications and aligning with data-driven approaches in user experience enhancement.

Laptop Price Determination Analysis (Jan 2024 ~ Apr 2024)

• Description: Conducted an in-depth statistical analysis to identify key factors influencing laptop prices using a dataset of over 1,000 entries, including variables

- such as brand, processor type, core count, and RAM size. This project aimed to support product pricing strategies by providing insights into the impact of technical specifications and brand value on market prices.
- Approach: Utilized multiple linear regression and ANOVA in R to evaluate the significance of various factors, testing model assumptions (independence, linearity, homoscedasticity, and normality) through diagnostic plots and transformations.
 Applied a backward elimination method to determine the optimal model, retaining variables that significantly affected pricing.
- Results: Discovered that processor grade, brand, core count, and RAM capacity were statistically significant predictors of laptop prices, explaining approximately 82% of the price variance. This analysis validated the importance of these factors in pricing strategies, aligning with the statistical rigor required in advanced research and analysis.

EXPERIENCES

SK Group AI and Data Science Intensive Training Program (Oct 2024 ~ Apr 2025) - Selected for a competitive training program in AI and data science

- Data Analysis and Machine Learning for Research: Engaged in comprehensive data processing and predictive modeling using Python, enhancing my ability to explore complex data structures critical for statistical modeling research.
- Advanced NLP and Large Language Models (LLM): Developed expertise in customized AI models through prompt engineering and model fine-tuning, laying a foundation for statistical natural language processing research
- Multimodal Data Processing and AI Application Development: Acquired skills in handling diverse data types and integrating them into research applications using Django and cloud platforms, which are valuable for complex data analysis in academic research

Hanwha – Analyst Internship (Apr 2023 ~ Aug 2023)

- Description: Analyzed and managed customer data to recommend personalized insurance products, utilizing Python for data processing, which increased customer engagement by 10% (~500 more active users monthly).
- Approach: Collaborated with teams to automate data processing, achieving a 20% improvement in efficiency and reducing manual processing by 2 hours daily.
- Results: Conducted discrepancy analyses and provided data-driven recommendations, which contributed to a 15% increase in overall sales. This experience strengthened my ability to utilize data analysis for real-world impact.

SKILLS

Data Analysis & Statistical Tools: Python, R, SQL, SAS, RStudio, Jupyter, Tableau, ggplot2, plotly, Pandas, Cloud Computing (AWS/GCP), HeidiSQL

Technologies: Machine Learning, Deep Learning, NLP, Multimodal Data Processing, AI **Additional Skills:** Database Management, Data Analysis, Statistical Software Proficiency