

Skills

Technical

- R studio, Tableau, Python, MySQL, SAS
- Microsoft Word, Microsoft Excel, Microsoft PowerPoint

Statistical skills

- Familiar with linear regression, partial least square, least square, random forest, step function, neural nets, regression tree, bootstrap aggregation, boosting method, principal component analysis, XGBoost and factor analysis

Transferable skills

- Collaborating teamwork is demonstrated through familiarity with military protocol and discipline.
- Organizational skills developed through various work settings including military operations.
- Strong analytical and problem-solving skills.
- Native Korean speaker, fluent in English.

Education

SIMON FRASER UNIVERSITY – BURNABY

Sept 2019 – Dec 2023

- Bachelor of Science – **Statistics**

Certificate

IBM DATA SCIENCE - COURSERA

Dec 2023

Projects

HACKATHON – HACK THE THREAT 23

Feb 2023

- Collaborated with a team to design a tool that could automatically identify and anonymize sensitive information by implementing k-anonymity techniques to ensure data privacy and confidentiality.
- Developed a data anonymizer using Hugging Face and Python so that people without specific knowledge can upload and download the data file freely.
- Contributed to building the data input module and validating the anonymization output, demonstrating proficiency in Python programming language and data analysis techniques.

Relevant Coursework

STATISTICAL LEARNING AND PREDICTION (STAT 452)

Sept 2022 – Dec 2022

Building a predictive model using training data

- Completed rigorous coursework in statistical learning and prediction, applying various methods to build predictive models on training data.
- analyzed and trained the data set with 15 variables of training data with hidden variable names with R studio
- Gained experience building predictive models using various machine learning algorithms including partial least square, least square, random forest, step function, neural nets, regression tree, bootstrap aggregation, and boosting method, in coursework

LEARNING BIG DATA (STAT 440)

Oct 2023

- Developed a predictive model for housing prices using machine learning algorithms and data visualization techniques in the Private Kaggle competition.
- Performed exploratory data analysis to identify key variables of multiple numerical features to improve model efficiency.
- Trained and tuned several machine learning models, including linear regression random forest, and boosting, to identify the best-performing algorithm.
- Implemented feature engineering techniques, leveraging domain knowledge and creativity, to enhance the model's predictive power
- Successfully improved the RMSE score in the Kaggle competition through effective feature engineering strategies

TIME SERIES ANALYSIS (STAT 485)

Dec 2023

- Explored precipitation patterns in Perth, Australia, utilizing advanced statistical techniques to model and analyze time-dependent data.
- Identified a 12-month seasonality through scatter plot and applied the Box-Jenkins methodology to select the optimal model
- Employed dynamic modeling techniques to refine the chosen model, addressing correlated residuals and enhancing overall robustness.
- Utilized optimal model for 12-month rainfall forecasting, establishing 95% prediction limits, and validate predictions against actual Perth Airport measurements, affirming the model's reliability in capturing seasonality and prediction.

Work Experiences

CAFÉ ARTIGIANO– Barista, Vancouver, BC

Feb 2022 – Mar 2023

- Demonstrated excellent time management skills by efficiently completing tasks such as cleaning and restocking supplies during slow periods to ensure that the café was prepared for peak hours.
- Communicated effectively with team members and customers, demonstrating strong interpersonal skills and the ability to adapt communication style to meet diverse individuals' needs.
- Paying attention to detail providing precisely and accurately prepared food and beverages in a busy café environment.

KOREAN ARMY – Soldier, Sokcho, Korea

Jul 2019 – Feb 2021

- Paying attention to detail, contributed to effective operations of the army by accurately managing uniform inventory placing correct orders and distributing to over 300 personnel.
- Collaborated with fellow military personnel, and superiors to achieve shared goals, contributing to the success of various military training operations.
- Worked effectively in a team-oriented environment, supporting team members, and communicating clearly to ensure mission success.
- Trained and mentored new military personnel on protocols and procedures, fostering a collaborative learning environment that enabled quick integration and success.
- Contributed to cross-functional teams responsible for identifying and implementing process improvements, streamlining workflows, and increasing overall efficiency.