Richard Lim

201-820-8219 | richardlim7100@gmail.com | Web Portfolio | Waldwick, NJ

Education

Villanova University May 2024

B.S. in Statistics; Minor in Mathematics | GPA: 3.57

Coursework: Data Science, Algorithms and Data Structures I and II, Applied Statistical Models, Data Base Systems, Linear Algebra, Design of Statistical Experiments, Mathematical Statistics I and II, Discrete Mathematics, Calculus I, II, and III

Experience

Villanova Baseball **Villanova, PA**

Data Analyst February 2022 - Present

- **Improved team record from 3-13-1 to 16-16** by crafting comprehensive scouting reports with data analyses that highlighted opposing teams' pitching and hitting tendencies with attention to detail.
- **Analyzed opponents' data** leveraging R and Baseball dashboard. Collaborated with fellow analysts to convey insights.
- **Presented data-driven analyses to coaches**, effectively using written and verbal communication skills. Collaborated with the coaching staff to develop strategies and developmental plans based on analyses for player improvement.

Villanova Recreation **Villanova, PA**

Fitness Center Receptionist August 2021 - Present

- **Reduced damages by 95% and accidents by 98%** and ensured safe customer experience for over 50 daily facility users through meticulous instructions on equipment.
- **Maintained a rate of 100% adherence to policies** and ensured customer satisfaction by enforcing policies.

Colorado Summer Institute in Biostatistics **Denver, CO**

Fellow June 2022 – August 2022

- **Engineered a random forest model with an out-of-bag error rate of 3.87**, utilizing random forest machine learning on a big data set to identify predictors of obesity in American youth.
- **Organized an engaging presentation for a non-technical audience**, employing data wrangling and visualization techniques. Developed visuals of geospatial distribution, decision trees, and partial dependence plots.
- **Attained top 5 placement in a collaborative 6-hour hackathon** by implementing machine learning models, including random forest and linear regression, to predict intubation duration. Delivered analysis to a panel of judges.

Projects

Predicting Survival of Passengers on the Titanic | Python / Kaggle

- Performed exploratory data analysis, feature engineering, scaling, and create custom transformers and pipeline on Titanic data set to create model that predicts passenger survivability.
- Trained a Random Forest model and used hyperparameter tuning to find best model: model was given a score of 83%.

Breast Cancer Classification using Neural Networks | Python / Kaggle

- Constructed a neural network model architecture using Keras Sequential API, optimizing it with Adam optimizer and sparse categorical cross-entropy loss.
- Trained the model with training data and evaluated its accuracy on test data, achieving an accuracy of 96%.

Activities

Sports Analytics Club, Villanova University August 2021 - Present

Club Sailing, TIDE Representative, Villanova University August 2021 - Present

- Led team in discourses on diversity, equity, and inclusion and how to present themselves in a predominantly Caucasian sport.

Villanova Leadership Program, Villanova University January 2022 - April 2022

Skills

Technical: Python (Matplotlib, Seaborn, Sklearn, NumPy, Pandas), R (dplyr, tidyr, ggplot2, Shiny), SQL, Java, HTML

Analysis Techniques: Neural Networks, Logistic Regressions, Decision Trees, Random Forests, Hypothesis Testing

Tools: Tableau, R Markdown, Jupyter Notebook, PyCharm, RStudio, VSCode, Excel (Power Query, V-Look Up, Pivot Tables)

Languages: Fluent in English and Korean, proficient in Spanish