# Richard Lim

201-820-8219 | richardlim7100@gmail.com | richardlim10.github.io/WebPortfolio/ | Waldwick, NJ

## Education

**Villanova University** May 2024
*B.S. in Statistics; Minor in Mathematics* | GPA: 3.52
**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, 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 producing in-depth scouting reports with data analyses on opposing teams' pitching and hitting tendencies.
- **Analyzed opponents' data** utilizing R and Synergy Baseball. Communicated findings and analyses with analyst team.
- **Presented data analyses to coaches** using strong written and verbal communication skills. Developed in-game and developmental strategies with coaches, using analyses.

**Villanova Recreation** **Villanova, PA**
Fitness Center Receptionist August 2021 - Present
- **Reduced damages by 95% and accidents by 98%** by providing comprehensive instructions to over 50 daily facility users on the proper and safe operation of equipment.
- Consistently enforced all facility and program policies **resulting in a 100% adherence to policies.**

**CoSIBS** **Denver, CO**
Fellow June 2022 – August 2022
- **Built a random forest model with an out-of-bag error rate of 3.87:** Implemented random forest machine learning to a large dataset and identified predictors of obesity in American youth.
- **Developed presentation given to non-technical audience** by using data wrangling and data visualization techniques. Produced models of geospatial distribution, decision trees, and partial dependence plots.
- **Finished top 5 in a collaborative 6-hour long hackathon**. Implemented machine learning models, including random forest and linear regression to predict the duration of intubation. Presented analysis to panel of judges.

## Projects

**Predicting Survival of Passengers on the Titanic** | Python
Performed data preprocessing, exploratory data analysis, feature engineering, and scaling on Titanic data set. Created and trained a Random Forest model and used hyperparameter tuning to find best possible model. The model was given a score of 82% and predictions are made on a test dataset.

**Predicting 2023 NBA Free Agency Per Year Salaries** | R / Tableau / Excel
Performed data collection, cleaning, and analysis on Per Game and Advanced stats of 2022 NBA free agents on their most recent playing season. Created a multiple linear regression model and identified significant factors that contributed to per year salary and implemented to 2023 NBA Free Agency class. Created dashboards for visualizing insights with Tableau.

## Activities

**Sports Analytics Club,** Villanova University August 2021 - Present
**Club Sailing**, TIDE Representative, Villanova University August 2021 - Present
- **Increased participation of minority groups by 500%** by leading 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

**Programming and Database**: Python (Matplotlib, Seaborn, Sklearn), R (dplyr, tidyr, ggplot2, Shiny), SQL, Java, HTML
**Analysis Techniques**: Logistic Regressions, Decision Trees, Random Forests, Hypothesis Testing
**Tools**: Tableau, Kaggle, R Markdown, Jupyter, PyCharm, RStudio, VSCode, Excel (Power Query, V-Look Up, Pivot Tables)
**Languages:** Fluent in English and Korean, proficient in Spanish