Seohee Yoon

470-838-2401 | akheyn029@gmail.com | Atlanta, GA | https://syoon029.github.io/

## Education

**Georgia Institute of Technology** — **Atlanta, Georgia**

Master of Science in Computer Science — *Aug 2024- Dec 2025*

Bachelor of Science in Computer Science — *Jan 2022 - May 2024*

## Experience

**PTKOREA** — **Seoul, South Korea**

*Big Data Analysis and Operation Assistant Intern* — *Jun 2024 – Aug 2024*

- Organized and maintained data for over 1,000 customer accounts, using Jira and Tableau to track and resolve account-related issues efficiently
- Managing the periodic modification and mapping of databases to cater to the needs of professionals, ensuring system consistency and reducing errors in Excel
- Participated in team meetings with international clients, enhancing communication and resolving complex customer issues

**Data Driven Education, Georgia Institute of Technology** — **Atlanta, Georgia**

*Research Assistant - Data Scientist* — *Aug 2022 – Dec 2023*

- Applied machine learning techniques (Random Forest, Decision Trees, Support Vector Machines) to predict difficulty levels of assessments based on the Depth of Knowledge (DOK) framework, reducing prediction errors by 50% using random forest algorithms
- Scaled the dataset size from 50 to 900, improving the random forest model's accuracy by 50% compared to the baseline
- Evaluated multiple regression models using Python and scikit-learn, resulting in improved accuracy of assessment difficulty predictions for educational research

## Projects

**Respiratory Diagnosis Assistant** — *Feb 2024 – May 2024*

- Developed a machine learning-powered web app for lung sound classification, enhancing diagnostic accuracy from 70% to 83% by implementing a GRU model and data augmentation techniques
- Managed data using MongoDB and Amazon S3, integrating the database with Django to improve data accessibility

**Stock Market Prediction Project** — *Feb 2024 – May 2024*

- Predict stock price changes using several machine learning algorithms such as Support Vector Regression, Linear Regression, and LSTM
- Evaluate linear regression models using K-fold cross-validation, resulting in 95% accuracy in prediction
- Visualize prediction results from various models and compared each accuracy using Tableau

**Scene Recognition with Deep Learning Project** — *Nov 2023*

- Implemented a CNN model (SimpleNet) with PyTorch to classify scenes with 2 convolutional layers, improving accuracy through data augmentation and regularization techniques.
- Enhanced pretrained resnet from pytorch's API by modifying layer of model to get a testing accuracy of 85%

**Campus Discovery Service Project** — *Aug 2022 – Dec 2022*

- Collaboratively engineered a Campus Discovery Service Application with a team of 5 within an Agile framework comprising 6 sprints
- Designed user interface and user experience for five iOS application screens, employing JavaScript and React Native
- Utilized version control systems and enhanced team collaboration by integrating and consistently using GitHub for code management and project tracking

## Skills

Python, Java, MySQL, Git, Pandas, C#, Assembly Programming, C, React, Tableau, JavaScript, React Native