DONGGYU KIM

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EDUCATION

UCLA, Los Angeles, CA, USA   **Sep 2020-Jun 2024**
BS in Statistics and Data Science, College of Letters and Science
   Cumulative GPA: 3.63/4.0
   Dean's Honors List: Fall 2020, Winter 2024

Foothill College, Los Altos Hills, CA, USA   **Apr 2018-Jun 2020**
Associate in Science in Mathematics
   Cumulative GPA: 3.93/4.0
   Dean's List: Spring, Summer, and Fall 2018; Winter, Spring, Summer, and Fall 2019; Winter 2020

SELECTED PROJECTS

MLB Pitcher Injury Analysis: Does Spin Rate Predict Injury?   **Apr 2024-Jun 2024**
- Practice of Statistical Consulting Course, supervised by Professor Dave Zes
- Directed a team project in collaboration with Stan Conte, VP of Medical Services for the LA Dodgers, defining the research question and developing the analytical approach
- Managed the processing and cleaning of over 5 million raw data, transforming them into a structured format for statistical analysis to explore the correlation between pitching metrics and injury risk
- Enhanced professional-level data handling skills, analytical capabilities, teamwork skills, and problem-solving abilities in real-world contexts while incorporating client specifications and feedback

Workplace Support and Mental Health in Tech Industry   **Apr 2024-Jun 2024**
- Social Statistics Course, supervised by Professor Mark S. Handcock
- Led an independent data analysis project, from topic selection to dataset sourcing and application of advanced statistical techniques
- Conducted an analysis of mental health treatment-seeking behavior using Multiple Correspondence Analysis and Logistic Regression, identifying significant predictors such as work interference and access to mental health benefits
- Gained comprehensive experience in the full research process, including topic and dataset selection and the application of advanced statistical methods for effective analysis and interpretation

Text Analysis and Dialogue Classification Using R   **Jan 2024-Mar 2024**
- Introduction to Text Mining Using R Course, supervised by Professor Akram Almohalwas
- Applied Natural Language Processing techniques in R to analyze sentiment and thematic variations between a literary series and its cinematic adaptations
- Developed a text analysis pipeline to extract linguistic patterns from scripts and books and to perform sentiment analysis and readability assessments
- Demonstrated proficiency in model development by implementing a classification model using Random Forest to categorize dialogue, achieving 84.8% accuracy

How AI Can Help Reduce Mispredictions of Election Results   **Jan 2020**
- Conducted a literature review and analysis on the use of AI to improve the accuracy of election surveys, highlighting the potential of data science to enhance predictive models and methodologies in political science
- Submitted the paper for review to the *Journal of Survey Statistics and Methodology* in January 2020

WORK EXPERIENCE

DYPNF, Seoul, Korea   **Aug 2024-Present**
* DYPNF is a leading engineering company specializing in pneumatic conveying systems, ranked first in Korea and third globally

Data Analyst, **Future Strategy Department**
- Conducted risk assessments for new projects by analyzing financial and operational data, providing actionable insights to mitigate potential challenges for strategic decision-making
- Developed predictive models for pneumatic conveying systems to identify maintenance needs and minimize system downtime
- Collaborated with the engineering department to collect, preprocess, and analyze operational data
- Conducted market research for establishing overseas branches in the USA and Dubai
- Visualized complex datasets and generated reports with Power BI and Python to deliver key insights to support business operations

Bax Intelligence, Seoul, Korea   **Jun 2023-Aug 2023**
* Bax Intelligence is a company focused on developing big data and artificial intelligence solution models

Data Analyst, **Division of Artificial Intelligence**
- Structured data on key metrics such as revenue, asset ratios, and profit margins to optimize decision-making for FNCSP consulting services
- Assisted in categorizing and analyzing company profiles to enhance the accuracy of corporate growth indexes and forecasting tools used for strategic recommendations
- Contributed to the development and visualization of industry-specific statistical reports
- Applied capsule network techniques through a computer vision project to develop a program that analyzes psychological states based on hand-drawn images, improving the reliability of mental health assessments

TEACHING EXPERIENCE

Foothill College, Los Altos Hills, CA, USA   **Jan 2019-Dec 2019**
Calculus Tutor, Pass the Torch program
- Delivered interactive Calculus tutorials, resulting in significant improvements in student grades
- Engaged in tutor training sessions and peer discussions to refine tutoring techniques and adapt to diverse learning styles, ensuring a supportive learning environment

Silicon Valley Korean School, Cupertino, CA, USA   **Apr 2018-Jul 2018**
Assistant Teacher
- Provided supplemental Korean language instruction to assist middle school students
- Co-organized cultural exchange events to enhance cultural appreciation

MILITARY SERVICE

Korean Augmentation to the United States Army, Pyeongtaek, Korea   **May 2021-Nov 2022**
Sergeant/Automated Logistical Specialist, Camp Humphreys – 2nd Infantry Division
- Managed G-Army system and warehouse operations in collaboration with the U.S. Army
- Served as an interpreter and translator between Korean and US military personnel
- Awarded the U.S. Army's Army Achievement Medal, won the Battalion KATUSA of the Month Competition, and recognized as Best Battalion Soldier of the Month.

ACTIVITIES

Korean-American Scientists and Engineers Association (KSEA)   Sep 2023-Jun 2024
- Engaged in a weekly LeetCode study group
- Collaborated with team members to practice coding challenges and enhance problem-solving skills.

Math Club, Foothill College   Apr 2019-Mar 2020
- Explored advanced math concepts and developed various types of math questions to prepare for the AMATYC Student Math League competition.

Let's Play Math, Los Altos Hills, CA, USA   Apr 2018, Apr 2019
- Volunteered at the annual community event organized by the Foothill Math Department
- Hosted an interactive booth where children practiced integer addition using building blocks, making math fun and accessible for young learners

SKILLS

Programming Languages	R, Python, SQL, C++
Tools & Technologies	Proficient in data analysis and statistical software, with expertise in applying Python for machine learning applications
Languages	Korean (native), English (fluent in speaking, high proficiency in reading and writing)