Eujin Chae

(201) 484-9960 • echae@middlebury.edu • linkedin.com/in/eujin-chae

EDUCATION

Middlebury College

Sep 2021 – May 2025

Bachelor of Arts - Major in Statistics

• **Cumulative GPA:** 3.65/4.0

• **Relevant Coursework:** Data Science, Multivariable Calculus, Linear Algebra, Regression Analysis, Probability Theory, Statistical Learning, Time Series Analysis, Stochastic Processes, Statistical Inference

• **Programming Skills:** R, SQL, Excel, Python

Work Experiences

Vermont Futures Project

Middlebury, Vermont

Statistical Consultant Intern

Feb 2025 – May 2025

- Collaborated with Director Kevin Chu to refine Vermont's economic action plan by integrating county-level data insights on age, labor force participation, and housing across all 14 counties.
- Analyzed American Community Survey (ACS) data in R to identify counties best positioned for workforce growth.
- Designed an interactive **Shiny dashboard** that allows Vermont residents to explore local economic trends.

Sports Innovation Lab

Hula, Vermont

Data Analyst Intern

June 2024 – Aug 2024

- Utilized advanced SQL queries in Snowflake to segment 57.3 billion U.S. consumer transactions and built targeted audiences for future analysis.
- Automated categorization using a Retrieval Augmented Generation (RAG) model in R, reducing manual efforts by 67%.
- Leveraged SQL to analyze demographics, spending behavior, and trends among college sports fans, identifying that they are 4.2x more likely to spend on athleisure/activewear than the general population.
- Published a <u>white paper</u> on behavioral insights of college sports fans, featured as a company report, and presented to NCAA
 President Charlie Baker to inform strategic decisions around fan engagement, viewership, and sponsorship deals using data-driven insights.

Middlebury College

Middlebury, Vermont

June 2023 – Aug 2023

Research Assistant in the Department of Statistics

- Conducted a comparative analysis of the 2018 and 2022 FIFA World Cups using match event data (234K+ observations, 181 features) to investigate the statistically significant 8.8% difference in crossing efficiency found between the two tournaments.
- Built supervised machine learning models (LDA, Random Forest, XGBoost) in R to identify key factors influencing the outcome of crosses.
- Performed statistical tests in R, using methods such as Chi-Square test and 2-sample proportions test, to evaluate research hypotheses.
- Created <u>data visualizations</u> in R using ggplot2 to effectively communicate key findings.

Project Experiences

MiddCORE

Student Consultant

Middlebury, Vermont

Jan 2023 - Feb 2023

- Conducted a consulting project for LEGO®, recommending strategies to strengthen parent-child bonds.
- Proposed a challenge-based app featuring streaks and record-keeping, designed to bridge the digital world with physical play.
- Pitched our recommendations to the LEGO® executives including Erik Hansen (Tech innovation Director), Liz Carey (Head of Play Discovery), and others at LEGO® HQ.

Extracurriculars and Activities

Middlebury College Men's Varsity Soccer

Aug 2021 - Dec 2024

- Achieved Second Team All-NESCAC for the 2022-23 season.
- Helped lead the team to two NCAA Elite 8 appearances and one NCAA Final Four appearance.
- Featured in 75 matches (55 starts) and played a total of 4506 minutes.