Yuntae Ju

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EDUCATION
Yonsei University, Seoul, Korea
M.S in Physical Education (Exercise Physiology)   2025 - Present

Yonsei University, Seoul, Korea
B.S. in Physical Education & B.A. in Economics   2019 - 2023
Graduated in the top 10%

MAJOR RESEARCH INTERESTS
Statistical machine learning for longitudinal and observational data; interpretable prediction and risk modeling for decision-making; mixed-effects and hierarchical models for heterogeneous populations; algorithmic fairness and accountability in high-stakes decision systems

PUBLICATIONS
[3] Kim, Y.-H., Lee, J.-H., **Ju, Y**., Oh, M., & Suh, S.-H. (2025). Satellite cell responses to exercise and nutritional interventions. Journal of Coaching Development, 27(10), 299–313.

[2] Lee, J.-H., Kim, Y.-H., **Ju, Y**., Oh, M., & Suh, S.-H. (2025). Resistance exercise and protein supplementation strategies to overcome anabolic resistance in aging muscle: A review. Journal of Coaching Development, 27(10), 314–328.

[1] **Ju, Y**., Ryoo, H., & Suh, S.-H. (2023). Clustering rookie Korean baseball pitchers and predicting potential by use of machine learning. Journal of Coaching Development, 25(2), 190–197.

MANUSCRIPTS UNDER REVIEW / IN REVISION

Ju, Y., Oh, M., Lee, J., Kim, Y., Jang, S. J., Yoo, J., Park, K.-N., Kim, Y. S., Ryoo, H., Kim, D.-H., & Suh, S.-H.
 Performance Modeling for Men's 100m Freestyle: An Artificial Intelligence and Longitudinal Analysis Approach.
Scientific Reports (under review)

Ju, Y., & Suh, S.-H.
 Predicting and Explaining Salary Change Rates among KBO Pitchers Using AI-driven Models.
Scientific Reports (under review)

Ju, Y., Lee, J., Kim, Y., Kim, D.-H., & Suh, S.-H.
 Artificial Intelligence–Driven Athlete Performance Passport for Enhancing Anti-Doping Prediction in Elite Male Weightlifting.
npj Digital Medicine (under review)

Kim, Y., **Ju, Y.**, Lee, J., & Suh, S.-H.
Exercise-Induced Changes in Skeletal Muscle Satellite Cells in Humans: A Systematic Review and Meta-analysis.
Medicine & Science in Sports & Exercise (with editor)

CONFERENCES

Ju, Y.* & Suh, S.-H. (2026). Artificial intelligence-driven athlete performance passport for enhancing anti-doping strategies in elite male weightlifting. 31st Annual Congress of the European College of Sport Science (ECSS), Lausanne, Switzerland. (Accepted for presentation; ECSS Young Investigators Award candidate)

Ju, Y.* & Suh, S.-H. (2025). Artificial intelligence-driven athlete performance passport for elite male weightlifting. 67th Sports Medicine Conference, Seoul, Korea.

RESEARCH & PROFESSIONAL EXPERIENCE

Research Assistant, Yonsei University   2021-2024
Study on the Establishment of an Anti-doping Platform using Sport Big Data Modeling

Researcher, Frontier Research Institute of Convergence Sports Science,
Yonsei University   2025 - Present

Active-Duty Officer, Republic of Korea Marine Corps   2023 - 2025
Honorably discharged as First Lieutenant (Reserves)

Reserve Officers' Training Corps (ROTC) Cadet, Republic of Korea   2021 - 2023

TEACHING EXPERIENCE

Teaching Assistant, Health Education   Spring 2025, Spring 2026

Teaching Assistant, Exercise Physiology   Fall 2025

HONORS & AWARDS

Full Graduate Scholarship (M.S. Program), Yonsei University   2025 - Present

Jinri Scholarship for Academic Excellence, Yonsei University   2020, 2021, 2022

SKILLS
Programming & Data Analysis: Python, R, STATA, MATLAB, Tableau
Language Skills: Korean (Native), English (Fluent), Japanese (Intermediate)

MATHEMATICS & STATISTICS COURSEWORK

Calculus, Linear Algebra, Mathematical Statistics, Real Analysis, Econometrics, Mathematical Economics, Game Theory, Financial Engineering, Business Analytics

CERTIFICATION

KBO Official Scorer, Korea Baseball Organization