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EDUCATION

Ph.D. in Public Health (Health Behavior Track) 2020 – 2024
University of California, San Diego (UCSD) / San Diego State University, San Diego, CA

- Advisor: Eric Hekler, PhD
- Dissertation: *Optimizing Adaptive Interventions for Physical Activity*

B.S. in Bio and Brain Engineering (Subspecialty: Bioinformatics) 2002 – 2011
Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea

SELECTED PROJECTS & ACTIVITIES

AI Basic Health Strategy 2026 – present

- Led a team of planners and engineers to develop a comprehensive framework for universal access to AI-driven health initiatives, spanning R&D through commercial industry.

APEC High-Level Meeting on Health & Economy (HLMHE15) 2025

- Led the HLMHE15 Planning Team and steered the negotiation process for the Joint Ministerial Statement among APEC member economies.
- Organized and hosted HLMHE15 in Korea, advancing multilateral cooperation.

U.S.–Korea Pharmaceutical Trade Policy & National Biosecurity Strategy 2024 – 2025

- Led a cross-ministerial team to develop trade strategies in response to U.S. government actions.
- Developed a comprehensive framework for addressing biological threats, integrating 12 government ministries.

Agile Electrification (Design Lab, UCSD) 2023 – 2024

- Led a subproject focused on ML modeling of energy load growth and on improving homeowner energy literacy.
- Addressed challenges in obtaining utility bills to predict the impact of home electrification.

Clinical Trials: JustWalk JITAI & YourMove (NIH-funded) 2020 – 2024

- Developed the backend server, mobile app, and monitoring system for system identification experiments.
- Applied machine learning and Bayesian regression to identify "just-in-time" states for interventions.

Health Information Policy Initiatives 2017 – 2020

- **De-Identification Guideline:** Led the drafting of Korea's first health information de-identification guideline.
- **National Bio Big Data Plan:** Planned the "One Million Genomes Project" (launched in 2022).
- **Medical Big Data Linkage Platform:** Connected national centers (KCDC, HIRA, Cancer Registry).

PROFESSIONAL EXPERIENCE

Director, Division of Healthcare Data Development Feb 2026 – Present
Ministry of Health and Welfare, Sejong, Korea

- Spearhead national strategies for the healthcare data ecosystem and health AI adoption, overseeing both infrastructure development and regulatory frameworks.
- Drive initiatives to leverage large-scale medical data for precision medicine while establishing governance for data privacy and ethical AI use.

Team Leader, Health AI & Strategic Planning Task Forces May 2025 – Feb 2026
Ministry of Health and Welfare, Sejong, Korea

- **Health AI Policy (Nov 2025 – Feb 2026):** Oversaw comprehensive policies on artificial intelligence in healthcare, focusing on technology integration and safety standards.
- **Crisis Management (Oct 2025 – Nov 2025):** Led the Planning Team for the emergency response headquarters addressing the National Information Resources Service (NIRS) fire, managing rapid recovery protocols.

- **Global Cooperation (APEC 2025) (May 2025 – Oct 2025):** Directed the preparatory office for APEC 2025 hosted in Korea; organized the Senior Officials' Meeting (SOM-3) and the High-Level Meeting on Health and the Economy.

Deputy Director May 2024 – May 2025
Ministry of Health and Welfare, Sejong, Korea

- **Health Industry Policy:** Managed policies on biosecurity, biopharmaceutical supply chains, and bio-clusters.
- Led cross-functional teams on national strategies involving international trade and security.

Graduate Researcher / Ph.D. Candidate Sep 2020 – Mar 2024
University of California, San Diego (UCSD), San Diego, CA

- Conducted research on machine learning, health behavior, and optimization trials.
- Served as the lead technical staff member for NIH-funded clinical trials (JustWalk, YourMove).

Deputy Director 2011 – 2020
Ministry of Health and Welfare, Sejong, Korea

- **Healthcare Data Policy (2017–2020):** Oversaw data linkage, open government data, and privacy regulations. Established the National Medical Big Data Linkage Platform.
- **Healthcare AI & Precision Medicine (2017–2020):** Developed regulations for AI in medicine and precision medicine initiatives (cancer genomics).
- **Regenerative Medicine & "Right to Try" Act (2017–2018):** Drafted a $1B R&D plan and led legislative affairs for the use of advanced therapeutics.
- **Social Security Information System (2012–2015):** Operated a welfare fraud prevention program (saving $2.5B) and automated eligibility verification systems.

Software Developer / Engineer 2005 – 2008
Various Organizations (Iconlab, SNU, KAIST), Seoul / Daejeon

- Developed mobile applications, secure programming solutions, and bioinformatics visualization tools (Cytoscape).

SKILLS

- **Programming & Data:** Python, MATLAB, SQL, R, machine learning (scikit-learn, PyTorch), data modeling.
- **Development:** Server development, mobile app development (Android/iOS), system architecture.
- **Domain Knowledge:** Public health policy, bioinformatics, clinical trial design (JITAI, MRT), biosecurity.

INVITED TALKS AND LECTURES

1. "AI Capacity Building for the Health Workforce in Korea: From Medical AI to AI Medicine." *Forum on Harnessing Artificial Intelligence for Health Equity*, Asian Development Bank (ADB) Headquarters, Manila, Philippines. March 2026.
2. "Structural Characteristics of the Korean Health System and Digital Health Innovation." *Invited Lecture for the Stanford Graduate School of Business*, Seoul, Korea. March 2026.
3. "AI Basic Health Framework." *Invited Presentation to the WHO Department of Digital Health and Innovation* (Dir. Alain Labrique), Online. March 2026.

SELECTED PUBLICATIONS

1. **Park, J.** (2024). "Optimizing Just-in-Time Adaptive Interventions: Incorporating Idiographic, Dynamic Predictions to Support Physical Activity." *Doctoral Dissertation, University of California San Diego.*
2. **Park, J.**, Norman, G. J., Klasnja, P., Rivera, D. E., & Hekler, E. (2023). "Development and Validation of Multivariable Prediction Algorithms to Estimate Future Walking Behavior in Adults." *JMIR mHealth and uHealth.*
3. **Park, J.**, Kim, M., et al. (2023). "Advancing Understanding of Just-in-Time States for Supporting Physical Activity: Protocol for a System Identification Study." *JMIR Research Protocols.*
4. El Mistiri, M., ... **Park, J.**, et al. (2024). "Understanding 'Just-in-Time' States in Behavioral Interventions Using System Identification and Data Science Methods." *IFAC-PapersOnLine.*
5. El Mistiri, M., ... **Park, J.**, et al. (2022). "Model Predictive Control Strategies for Optimized mHealth Interventions for Physical Activity." *American Control Conference (ACC).*
6. **Park, J.**, Lee, M., & Bhak, J. (2005). "HExDB: Human EXon DataBase for Alternative Splicing Pattern Analysis." *Genomics & Informatics.*