

Jin-seo Kim

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EDUCATION

Northeastern University September 2024 - Present
Khoury College of Computer Sciences Boston, MA

- Doctoral student in Personal Health Informatics (Advisor: Professor Stephen Intille)

University of Pennsylvania August 2018 - May 2024
College of Arts and Sciences Philadelphia, PA

- Bachelor of Arts in Cognitive Science and Computer Science, *summa cum laude*
- Cumulative GPA: 3.94/4.0; Dean's List 2018-19, 2021-22

RESEARCH INTERESTS

Cognitive and Mental health, Dementia, Depression, Early Detection and Intervention, Mobile and Wearable Devices, Longitudinal Health Data Analytics, Machine Learning, Lifetime Care and Healthy Aging

HONORS AND AWARDS

Kwanjeong Educational Foundation August 2018 - May 2024
STEM Scholarship Recipient Seoul, South Korea

- * One of the 10 undergraduate students awarded for excellence in academics and extracurriculars
- * Receiving merit-based scholarship of \$60,000 annually until graduation (Expected May 2024)

RESEARCH EXPERIENCE

Department of Linguistics, University of Pennsylvania November 2022 – May 2024
Undergraduate Research Assistant Philadelphia, PA

- * Advisor: Professor Sunghye Cho
- * Constructed transcripts of speech data derived from ~150 Korean patients with Alzheimer's and Parkinson's disease
- * Performed statistical analysis to extract linguistic features that can distinguish between Alzheimer's patients and healthy individuals
- * Established Korean word frequency norms derived from a gender and age-balanced free speech corpus

Advanced Cardiovascular Imaging Lab, University of Pennsylvania June 2022 – November 2022
Undergraduate Research Assistant Philadelphia, PA

- * Advisor: Professor Walter R. Witschey
- * Researched methods to increase efficiency in pinpointing relevant image categories within a large-scale cardiac Magnetic Resonance Imaging database
- * Designed a PyTorch-based machine learning pipeline that automatically classifies cardiac Magnetic Resonance images, organizing them by heart orientation and contrast agent type

Shen Lab, University of Pennsylvania November 2021 – May 2022
Undergraduate Student Philadelphia, PA

- * Advisor: Professor Li Shen
- * Preprocessed Alzheimer's patients' anatomical MRI and FDG-PET images using [Clinica](#) and [Fastsurfer](#)

TEACHING & PROFESSIONAL EXPERIENCE

Department of Computer Science, University of Pennsylvania

August 2023 - May 2024

Teaching Assistant

Philadelphia, PA

- * Mentored students taking *CIS-5200: Machine Learning* and *NETS-1120: Networked Life* courses
- * Graded homeworks and exams for classes ranging from 50 to 200 students
- * Conducted weekly in-person office hours and led exam review sessions
- * Crafted homework and exam questions for the *NETS-1120: Networked Life* course

InterPrep SAT Academy

Summer 2019; Summer 2021

Full-time Instructor

Seoul, South Korea

- * Taught SAT, ACT, AP Computer Science, Statistics, and Calculus to a class of 20+ students
- * Advised students on essay writing and college application

Logistics Command, Republic of Korea Air Force

August 2019 - May 2021

Military Interpreter (SSgt)

Daegu, South Korea

- * Translated technical orders for the overhaul and maintenance of E-737 electronic warfare aircraft
- * Provided simultaneous interpretation from and into Korean for field grade officers and Boeing engineers

POSTER PRESENTATIONS

“KoFREN: Comprehensive Korean Word Frequency Norms Derived from Large Scale Free Speech Corpora,” *LREC-COLING 2024 Conference*. Turin, Italy, May 2024.

“Automated analysis of letter fluency data produced by Korean and American patients with Alzheimer's Disease and Mild Cognitive Impairment,” *Alzheimer's Association International Conference*. Amsterdam RAI, Amsterdam, Noord Holland, July 2023.

“Fully Automated Curation of Multicenter CMR Images in Pediatric and Adult Patients using Deep Learning,” *Penn-Stanford CVI Symposium*. University of Pennsylvania, Philadelphia, PA, October 2022.

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, SQL, LaTeX

Software & Tools: PyTorch, Pandas, Linux, Unix, Excel, Git, HTML, CSS

LANGUAGES

Korean (native proficiency)

English (advanced proficiency)

Japanese (advanced proficiency)

Spanish (intermediate proficiency)

RELEVANT COURSEWORKS

Computer Science: Machine Learning, Computational Linguistics, Data Structures and Algorithms

Math and Statistics: Linear Algebra, Multivariable Calculus, Probability Theory

Cognitive Science: Big Data, Memory and the Human Brain, Cognitive Neuroscience, Neurolinguistics

REFERENCES

Dr. Stephen S. Intille, Professor of Computer Sciences and Health Sciences

Khoury College of Computer Sciences & Bouvé College of Health Sciences

Northeastern University

s.intille@northeastern.edu

Dr. Sunghye Cho, Assistant Research Professor of Linguistics

Linguistic Data Consortium

University of Pennsylvania

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Dr. Walter R. Witschey, Associate Professor of Radiology

Department of Radiology, Perelman School of Medicine

University of Pennsylvania

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Dr. Duncan Watts, Stevens University Professor

Department of Computer and Information Science

University of Pennsylvania

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Dr. Marissa King, Alice Y. Hung President's Distinguished Professor

Department of Health Care Management

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Dr. Russell Epstein, Professor of Psychology

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Dr. Min Seok Baek, Assistant Professor of Neurology

Department of Neurology

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