

# Jin-seo Kim

215-618-7277 | jins0904@sas.upenn.edu | 3945 Chestnut Street, Philadelphia, PA

## EDUCATION

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### University of Pennsylvania

*College of Arts and Sciences*

August 2018 - Present

*Philadelphia, PA*

- Candidate for Bachelor of Arts in Cognitive Science and Computer Science
- Cumulative GPA: 3.96/4.0; Dean's List 2018-19, 2021-22

## RESEARCH INTERESTS

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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

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### Kwanjeong Educational Foundation

*STEM Scholarship Recipient*

August 2018 - Present

*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

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### Department of Linguistics, University of Pennsylvania

*Undergraduate Research Assistant*

November 2022 – Present

*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

*Undergraduate Research Assistant*

June 2022 – November 2022

*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

*Undergraduate Student*

November 2021 – May 2022

*Philadelphia, PA*

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

## TEACHING & PROFESSIONAL EXPERIENCE

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### Department of Computer Science, University of Pennsylvania

August 2023 - Present

*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

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“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

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

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

## LANGUAGES

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Korean (native proficiency)

English (advanced proficiency)

Japanese (advanced proficiency)

Spanish (intermediate proficiency)

## RELEVANT COURSEWORKS

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**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

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**Dr. Sunghye Cho, Assistant Research Professor of Linguistics**

Linguistic Data Consortium

University of Pennsylvania

csunghye@ldc.upenn.edu

**Dr. Walter R. Witschey, Associate Professor of Radiology**

Department of Radiology, Perelman School of Medicine

University of Pennsylvania

+1 215-662-2310, witschey@pennmedicine.upenn.edu

**Dr. Duncan Watts, Stevens University Professor**

Department of Computer and Information Science

University of Pennsylvania

djwatts@seas.upenn.edu

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

Department of Health Care Management

University of Pennsylvania

mdking@wharton.upenn.edu

**Dr. Russell Epstein, Professor of Psychology**

Department of Psychology

University of Pennsylvania

+1 215-662-2310, epstein@psych.upenn.edu

**Dr. Min Seok Baek, Assistant Professor of Neurology**

Department of Neurology

Yonsei University, Wonju College of Medicine

minbaek@yonsei.ac.kr