# SUNGJOON PARK 박성준

**Q** github.com/sjp117 **S** sjp30117@gmail.com

#### PROFESSIONAL SUMMARY

Cognitive neuroscience researcher with 5+ years of experience. Specializing in behavioral, fMRI, eye-tracking, and computational methods. Proficient in experimental design, cross-modal research, and statistical modeling of cognitive and behavioral processes. Strong record of collaborative research across 8 research projects resulting in 4 peer-reviewed publications and 11 conference presentations. Committed to advancing understanding of neural mechanisms underlying spatial and social cognition through innovative methodology and interdisciplinary collaboration.

#### PROFESSIONAL EXPERIENCE

#### **Staff Research Assistant**

2023 - Present

Carnegie Mellon University, Pittsburgh, PA

- Involved in 6 projects between 2 labs. Contributed to 4 peer-reviewed publications and 3 presentations.
- Processed and analyzed fMRI data using FSL, fmriprep, and adapted custom codes, for mapping neural selectivity in human visual cortex.
- Developed data visualization, wrangling, and statistical analysis pipeline using R and Python to effectively interpret data and communicate statistical inferences.
- Coordinated data collection across 6 behavioral, cognitive, and neuroimaging studies. Both online and in-person.
- Implemented R code for data wrangling and statistical analyses of behavioral and cognitive data.
- Collaborated with computer scientists to develop machine learning algorithms for sound morphing tools. Used Python to generate sounds and tested human evaluations of sound morphs.
- Collaborated with designers to study human spatial sound localization.

## **Graduate Research Assistant**

2020 - 2022

Texas A&M University, College Station, TX

- Designed and executed master's thesis examining cognitive mechanisms shared between spatial and social perspective-taking. Designed and conducted 2 experiments: one online, and one in-person experiment.
- Created Unity-based virtual environments for experimental stimuli.
- Published thesis findings establishing connections between spatial and social cognitive processes, with portions published on a peer-reviewed conference proceedings.
- Trained up to 9 undergraduate research assistants per semester on how to program using R, RStudio, and how to conduct basic data wrangling and statistical analyses.
- Collaborated with a kinesiology team to research brain processes during complex locomotor navigation.
- Supervised a team of 3 undergraduate research assistants, teaching how to program an experiment using Python, resulting in a pilot study on spatial memory and resulting in a poster presentation.

### **Undergraduate Researcher**

2018 - 2020

University of Waterloo, Ontario, Canada

- Designed and programmed eye-tracking experiment using Python that measured pupillary response to how we change our minds with new evidence.
- Built custom data analysis pipeline that processed of eye-tracking data.
- Self-motivated learning of Linux, R, and Python, developing computational skills used in all subsequent research projects.
- Assisted in data collection that contributed to a Master's thesis.

#### **SKILLS**

**Data Analysis:** Data wrangling, visualization, statistical modeling (mixed effects, generalized), Correla-

tion, t-test, ANOVA, descriptive statistics, contrast analysis, repeated-measures

**Software:** R, Python, SPSS, Microsoft Office, C++ (hobby)

**Computing:** Linux environment, version control (git), remote computing, bash scripting fMRI, eye-tracking experiment design, cross-modal research methodology

**Neuroimaging:** FSL, fmriprep, pycortex, freesurfer

**Hardware:** Eye-tracking systems (EyeLink, LiveTrack, SmartEye), Motion capture (Motek M-Gait),

**Personal Computers** 

**Soft Skills:** Interdisciplinary collaboration, mentoring, technical communication, project management

**Languages:** English (Native), Korean (Native)

#### **SELECTED PUBLICATIONS & PRESENTATIONS**

Oszczapinska. U., **Park. S.**, Qiu. Y., Nance. B., Julien. M., Heller. L., (2025). The impact of disgusting sounds on pupil diameter of misophonic and non-misophonic listeners. *Psychophysiology*.

Henderson M. H., Luo. A. F., **Park. S.**, Tarr. M. J., Wehbe. L. (2025). Generative modeling tools for characterizing human higher visual cortex. *Poster presented at the Cognitive Neuroscience Society 2025 Annual Meeting*.

**Park. S.**, Watanabe. B., Burte. H., (2022). Perspective taking and reference frames for spatial and social cognition. *Paper submitted to the CogSci 2022 Annual Conference*.

## **EDUCATION**

# Texas A&M University, College Station, TX

2020 - 2022

Master of Science in Psychological Sciences

Thesis: Relationship between Perspective Taking with Space and People

# University of Waterloo, Ontario, Canada

2013 - 2020

Bachelor of Arts in Psychology, with Thesis, Minor in Philosophy & Cognitive Science

Thesis: Mental Model Updating and Pupil Response