Minneapolis, MN 55305 | 952-240-3829 | smkaps@gmail.com | LinkedIn | Google Scholar | Website

### **KEY STRENGTHS**

Research & Experimental Design, Online & Laboratory Studies

Scientific/Grant Writing, IRB Authorization, FDA Device Approval

Quantitative & Qualitative Data Analysis

Advanced Statistical Analysis & Data Visualization

Collaboration With Academics, Engineers, Clinicians, Researchers, & Technicians

Presentation Skills: Design, Organization, Public Speaking

# **SKILLS**

**Statistics:** T-Tests, ANOVA, Linear/ Logistic Regression and Modeling, Multidimensional Scaling (MDS), Bayesian Analysis

#### Software & Languages:

JavaScript, HTML, CSS, Python, R, SPSS, SAS, MATLAB, Psychophysics Toolbox, Qualtrics, Amazon Mechanical Turk, Advanced MS Excel, Adobe Photoshop/Illustrator, Git, CED Signal, E-Prime, PsychoPy

Neurophysiology: Functional MRI (fMRI), Eye-Tracking, Transcranial Magnetic Stimulation, Brainsight Neural Navigation

### **EDUCATION**

# Doctor of Philosophy (PhD): Cognitive Neuroscience

George Washington University, Washington, DC, 2023

# Master of Arts (MA): Psychology

George Washington University, Washington, DC, 2021

# Bachelor of Arts (BA): Psychology

University of Washington, Seattle, WA, 2013

**Scientist and Researcher** with 10+ years of specialized experience as a cognitive neuroscientist performing behavioral and physiological research, with a focus on visual perception, working memory, and neuromodulation. Versatile skill set includes designing and implementing both online and laboratory studies, operating medical devices and optimizing tools for physiological measurement/intervention, and start-to-finish experimentation involving conceptualization, funding acquisition, project administration, methodology/software, data/statistical analysis, academic writing, visualization, and formal presentation.

## **EXPERIENCE**

### GEORGE WASHINGTON UNIVERSITY, Washington, DC

PhD Research Fellow, Department of Psychological and Brain Sciences, 08/2017 to 05/2023 Research Focus: Neural mechanisms and temporal dynamics of visual working memory

- Led 5+ research projects focused on assessing the bidirectional interaction between working memory and perception using behavioral techniques and physiological intervention, resulting in 2 conference presentations, 3 posters, and multiple publications
- Planned, executed, and analyzed data for large sample online studies via self-managed server; collected reliable behavioral data from 10,000+ participants
- Designed, constructed, and successfully executed a vision for a lab that allows for online brain stimulation with fMRI guided neural navigation and a photodiode-based visual trigger
- Delivered weekly coding and analysis workshops to undergraduate research assistants

# SEATTLE NEUROPSYCHIATRIC TREATMENT CENTER, Washington, DC Lead TMS Clinician, 12/2016 to 06/2017; TMS Clinician, 05/2015 to 12/2016

- Coordinated multiple end-to-end research trials investigating the use of Transcranial Magnetic Stimulation (TMS) for OCD, PTSD, and Parkinson's disease; engaged in recruitment, data collection/treatment, analysis/visualization, and final presentation
- Supervised a team of 12 staff members in regards to daily activities; involved in hiring
  decisions and designated trainer for new employees, managed equipment
  upkeep/maintenance and all necessary communication with manufacturer/distributor
- Cared for patients directly by administering daily TMS treatments, operated FDA approved medical devices while monitoring patient affect/mood, adapted and titrated as necessary
- Researched neuropsychiatric literature to aid providers in the construction of precise patient protocols as a function of unique symptomatology, further involved in treatment planning

#### UNIVERSITY OF WASHINGTON, Seattle, WA

#### Research Assistant, Department of Neuroscience, 09/2012 to 05/2015

Research Focus: Human color vision: perception of the color brown

- Designed and conducted surveys to assess subject qualification for experiment participation
- Engaged in lab day-to-day operations including: apparatus/material set-up, data collection and experiment implementation, curation/presentation of results to senior lab members
- Redesigned lab website, leading to 20% increase in graduate student applications

#### **SELECTED PUBLICATIONS**

- **Kaplan, S.**, Kravitz, D.J. (2023). A neural oscillation in the interaction between visual working memory and perceptual processing. (*In prep*).
- **Kaplan, S.**, Teng, C., Shomstein, S., Kravitz, D.J. (2023). Assessing the Interaction Between Working Memory and Perception through time. Cognition. (*Submitted in review*).
- Nau, M., Schmidt, A., **Kaplan, S.**, Kravitz, D.J., Baker, C. (2023). Centering cognitive neuroscience on task demands. Nature Neuroscience. (*Accepted in review*).