

Nastasia Klevak

Computational cognitive neuroscientist using behavioral experiments, neural data analyses, machine learning, and computational models to understand how cognitive effort and fatigue shape learning.

📍 Stanford CA, USA ✉ nklevak@stanford.edu in nastasia-klevak 🌐 nklevak

Education

Stanford University, PhD in Psychology (Cognitive Neuroscience) – Stanford CA, USA Sept 2023 – present
• Mind, Brain, Computation and Technology Fellow

Princeton University, BSE in Computer Science – Princeton NJ, USA Sept 2018 – May 2022
• Overall GPA: 3.7/4.0 (Departmental GPA: 3.9/4.0)
• Certificates in Cognitive Science and Linguistics
• Graduated Cum Laude and with Honors

Experience

PhD Candidate and Graduate Researcher, Stanford University – Stanford CA, USA Sept 2023 – present
• Design behavioral experiments and develop computational models to understand how cognitive effort and fatigue dynamically influence learning
• Analyze fMRI data to identify neural signatures of practice effects across cognitive control tasks
• Design and conduct a series of behavioral studies examining how AI assistance shapes learning outcomes and metacognitive judgments

Full-time Research Assistant and Lab Manager, Princeton Neuroscience Institute – Princeton NJ, USA Aug 2022 – Aug 2023
• Built supervised learning models to classify cognitive states from high-dimensional orbitofrontal cortex fMRI data
• Managed data collection for neuroimaging experiments

Software Engineer Intern, Meta, FAIR Labs – Seattle WA, USA May 2021 – Aug 2021
• Worked on an end-to-end video processing pipeline using Python to identify and optimize computational bottlenecks
• Improved video processing speed by 10× through algorithm optimization and efficient data processing

Software Engineer Intern, Meta – Boston MA, USA May 2020 – Aug 2020
• Developed and enhanced live location sharing features on Facebook web within the Location Products team
• Utilized React, PHP, Reason, CSS, HTML, JS, and Hack for web development

Publications

Task-Switching Resets Latent Performance States During Cognitive Effort In preparation
Nastasia Klevak, Joshua W. Buckholtz, Russell A. Poldrack

Estimating the replicability of psychology experiments after an initial failure to replicate Aug 2025

Veronica Boyce, Ben Prystawski, ... **Nastasia Klevak**, ... Michael C. Frank

<https://doi.org/10.1525/collabra.125685>

Conference Presentations and Extended Abstracts

Self-paced rest decisions: stable but ineffective for recovery

Aug 2026

Extended abstract and poster, CCN 2026 (selected as a spotlight)

Nastasia Klevak, Joshua W. Buckholtz, Russell A. Poldrack

Toward a neural taxonomy of cognitive control: A dense-sampling study of 46 individuals

June 2026

Poster, OHBM 2026

Patrick G. Bissett, ... **Nastasia Klevak**, ... Russell A. Poldrack

Atypical Event Segmentation in Schizotypy

June 2026

Poster, SOBP 2026

William N. Koller, ... **Nastasia Klevak**, ... Kenneth A. Norman, Yael Niv

The effect of task switching on cognitive fatigue

Aug 2025

Extended abstract and poster, CCN 2025

Nastasia Klevak, Joshua W. Buckholtz, Russell A. Poldrack

The best advice you can give

Aug 2022

Contributed talk, CCN 2022 (presented by Sevan Harootonian)

Sevan Harootonian, Mark Ho, **Nastasia Klevak**, Yael Niv

Teaching

Head Teaching Assistant, Introduction to Statistics: Precalculus (Psych 10/Stats 60) – Stanford University

Fall 2026

- Lead a 13-person teaching team for a 150-student course

Teaching Assistant, Cognitive Neuroscience – Stanford University

Spring 2025 & Spring 2026

Teaching Assistant, Introduction to Statistics: Precalculus (Psych 10/Stats 60) – Stanford University

Fall 2024 & Fall 2025

Skills

Programming: Python (NumPy, Scikit-learn, TensorFlow, PyTorch), R (tidyverse, LaMa), Java, C, Git, Web development (React, HTML, CSS, JS)

Research: fMRI and online behavioral experiment design, large-scale data analysis, machine learning, computational modeling (Bayesian, Markov, and mixed effects models)

Languages: English (Native), Russian (Fluent)