

# Joselyn Ho

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📄 [github.com/joselyngithubs](https://github.com/joselyngithubs)

Cognitive Science Ph.D. with over 7 years of experience in quantitative research design and data analysis.

## Experience

**Graduate Student Researcher.** *University of California, Irvine.* Sept 2016 – present

- Created and built the "Are You a Super-Listener?" game with Harvard Music Lab. Analyzed quantitative performance data for >30,000 players in **R** to identify characteristics that predict musical sensitivity and evaluated qualitative data to improve gameplay. 📄 [themusiclab.org/quizzes/scram](https://themusiclab.org/quizzes/scram)
- Analyzed data using **Bayesian statistical modeling** and **regressions** with **Matlab** and **R**. Communicated findings via 2 journal publications (3 manuscripts in preparation) and 8 conference presentations.
- Designed and conducted behavioral and neuroimaging experiments to study music and speech perception.
- Coded interfaces using **Javascript** and **Matlab** to collect human perception data in-person and online.
- Mentored over 10 undergraduate students to conduct independent research studies.
- Organized 3 seminars through the Center for Hearing Research and the Center for Neurobiology to network with researchers from other campuses and communicate neuroscience to the public.

**Data Science Intern.** *Northrop Grumman.* July 2018 – Sept 2018

- Learned **Unity/C#** in under 1 month to build a threat perception simulation. Collected and analyzed user data to model people's decision-making interactions. Proposed a training prototype for users to practice threat detection.
- Analyzed data using **diffusion modeling** and produced visualizations in **R** to identify unnecessary components in a customer's program and recommend solutions to improve efficiency.
- Measured biometrics such as heart rate and eye tracking to map their relationship to task difficulty.

**Research Assistant.** *Human Perception Lab/Rissman Memory Lab at UCLA.* Sept 2013 – June 2016

- Created experiments, compiled stimuli, and analyzed data using **Matlab** to develop educational technology that trains listeners to recognize musical composer styles.
- Developed and built a research experiment to study the memory of melodies and images. Analyzed data using SPSS (T-tests, ANOVA) and wrote up the findings in an honors thesis.

**Instructor/Teaching Assistant.** *University of California, Irvine.* Sept 2016 – Present

- Developed and taught a 6-week Cognitive Neuroscience course to undergraduate students (Summer 2020).
- Led discussion sections for undergraduate students, wrote exam questions, and graded assignments.

**Teaching Assistant.** *Johns Hopkins Center for Talented Youth.* Summer 2015, 2016

- Planned curriculum and led interactive activities to teach Psychology to 6th-12th grade students.

## Education

**Ph.D. in Cognitive Science.** *University of California, Irvine* 2016 – 2021  
2018-2020 Trainee at the UC Irvine Center for Hearing Research, funded by the National Institute of Health.  
Concentration in Cognitive Neuroscience.

**M.S. in Cognitive Neuroscience.** *University of California, Irvine* 2016 – 2019

**B.S. in Cognitive Science.** *University of California, Los Angeles* 2012 – 2016  
Neuroscience minor, Specialization in Computing, Departmental Honors, Regents Scholar, President of the Cognitive Science Student Association

## Skills

**Languages**      Matlab, R, Python, Javascript, C#/Unity, C++, HTML/CSS, SQL, PHP

**Techniques**    A/B testing, time-series analysis, experimental design, signal processing, regression, sampling algorithms, Bayesian statistics