

Celia Sagastume

Experienced Vision Science Researcher Specializing in AR/VR

Experienced Vision Science Researcher specializing in AR/VR, with a proven track record at Google conducting psychophysics and usability studies to inform product design.

SKILLS

Technical Skills: Matlab, Python, SQL, Excel, PowerPoint, Hardware Prototyping

Research & Analysis: Visual Perception, Light Adaptation, Visual Sensitivity, Psychophysical Methods, Temporal & Spatial Resolution, Data Collection & Analysis, GTA, Lecturer

EDUCATION

University of Waterloo — *PhD, Vision Science (in progress), 2026 - present*

Advisor: Dr. Austin Roorda, School of Optometry & Vision Science

Research: Adaptive Optics retinal imaging, AR waveguide development

Georgia Institute of Technology — *Graduate Coursework in Computer Science*

Metis — *Data Science Boot Camp*

San Francisco State University — *Masters in Psychology Research*

CONFERENCES & PRESENTATIONS

Sagastume, C., & Tate, C. (2018, March). *Think like a man: Salient manhood threat effect on cognition* [Poster M-082]. Society for Personality and Social Psychology Annual Convention, Atlanta, GA.

EXPERIENCE

Applied Vision Researcher, Google (contract)

NOV 2023 - MAY 2026

- Designed & conducted 6 psychophysics usability studies on visual perception of light and sensitivity to artifacts in AR displays influencing decisions in sharpness, display artifacts, and product designs
- Created software tools in Matlab and Python that automated processes, reducing research ramp up time by 20% and enabling running 2x more demos and experiments per quarter
- Led the design and construction of 3 research platform reference systems for AR/VR vision research

Applied Vision Research Assistant, Google (contract)

APRIL 2022 - NOV 2023

- Conducted 4 usability studies with a focus on perceptual elements, developing and implementing psychophysical paradigms to measure visual artifacts for AR and VR displays
- Developed data dashboards to monitor research data and coordinated clinical research studies using SQL, python, and Tableau, improving the speed and efficiency of participant tracking over several clinical studies and over 100 participants

Teaching Assistant, Metis

FEBRUARY 2022 - MAY 2022

- Supported students in an asynchronous data science bootcamp through online courses, individual tutoring and mentoring, and problem solving guidance
- Taught students how to code machine learning agents in python for data acquisition, organization, and analysis

Content Designer, Superset Venture Studios

FEBRUARY 2019 - JANUARY 2020

- Led content creation across multiple platforms (video, podcast, blog, web)
- Managed a team of videographers, editors, and content creators
- Developed original content to support a data-driven advertising platform
- Created guidelines for visual and programmatic aspects of content

Lecturer, San Francisco State University

AUGUST 2018- DECEMBER 2018

- Taught statistics for undergraduate psychology majors focusing on research data literacy and experimental design
- Covered inferential statistics, point estimation, confidence intervals, hypothesis testing, correlation, and regression

Lecturer, Palo Alto University

AUGUST 2018- DECEMBER 2018

- Lectured on the psychology of gender for undergraduate psychology majors focusing on gender identity development

Clinical Research Coordinator, UCSF

JUNE 2017 - JULY 2018

- Provided support to study staff in testing and tracking participants at 3 study sites on an HIV prevention study with over 125 participants
- Managed medical research data using an electronic health records (EHR) platform for over 125 participants

- Moderated 3 focus groups at 3 research locations with over 15 participants each session

Graduate Student Researcher, SFSU

OCTOBER 2015 - JUNE 2017

- Developed and implemented a qualitative codebook for the analysis of qualitative interview data
- Conducted qualitative interviews for a national longitudinal clinical research study

Graduate Student Teaching Assistant, SFSU

AUGUST 2015 - DECEMBER 2015

- Graded written assignments including homework, midterms, and finals for a Cognitive Psychology course for undergraduate students
- Lectured a class on Bayesian statistics

Conflict Resolution Mediator, Arizmendi DBC

JUNE 2012 – AUGUST 2015

- Facilitated structured mediation sessions to resolve interpersonal and operational disputes among worker-owners across the Arizmendi Association of Cooperatives and Rainbow Grocery Cooperative.
- Cultivated a neutral, safe environment for high-stakes conversations, utilizing active listening and conflict de-escalation techniques to rebuild professional relationships.
- Advised on internal policy improvements and communication frameworks to prevent future friction and strengthen the collective governance of San Francisco's cooperative business community.

Business Owner, Arizmendi Bakery

JUNE 2010 - AUGUST 2015

- Led the marketing and communications for the business, working with local business owners to develop products, campaigns, and outreach for the business.
- Created innovative products and seasonal offerings, ensuring a diverse and rotating menu that drove consistent customer engagement.
- Helped start and run a worker-owned cooperative, participating in democratic consensus-based decision-making and managing collective operations to ensure long-term business sustainability.