



14th Annual California
Cognitive Science Conference

FORGING CONNECTIONS:

Bonding & the Brain

APRIL 15, 2023

UC Berkeley Stanley Hall ADA Accessible

ASUC Sponsored

WELCOME!

The UC Berkeley Cognitive Science Students Association is proud to present the 14th Annual California Cognitive Science Conference! The theme for this year's conference is "Forging Connections: Bonding and the Brain."

Through this event, our speakers will explore the important roles of social connection in today's rapidly changing world. We will be diving into the science behind human connections through artificial intelligence, our relationship with "taboo" words, cross-cultural communication networks, and so much more. In between our speaker presentations, we encourage you to explore our research gallery, check out our interactive events, and touch some brains (literally).

We are excited to explore with you how we bond and interact from the perspectives of all the disciplines of Cognitive Science—Computer Science, Psychology, Neuroscience, Linguistics, Anthropology, Philosophy, and more.

Thank you for attending, and we hope you enjoy the conference!

Sincerely,
Tiffany Tian and Allira Bellawala
Co-Presidents, Cognitive Science Students Association

AND



Cognitive Science Students Association at the University of California, Berkeley

EVENT SCHEDULE

9:00 - 9:15 AM Opening

9:15 - 10:45 AM <u>Keynote</u>: Martin Hilbert

10:45 - 11:00 AM Break

11:00 - 12:00 PM Focus Talk 1: Steven Dow

12:00 - 12:45 PM Lunch

12:45 - 1:45 PM Focus Talk 2: Robin Queen

1:45 - 2:00 PM Break

2:00-3:00 PM Focus Talk 3: Lindsay Bowman

3:00 - 3:15 PM Break

3:15 - 4:15 PM Focus Talk 4: Hyowon Gweon

4:15 - 4:30 PM Break

4:30-5:30 PM Focus Talk 5: Douglas Guilbeault

5:30-6:00 PM Concluding Remarks

MEET OUR SPEAKERS: KEYNOTE



Martin Hilbert

University of California, Davis

Digital Immunity: human consciousness as shield for A.I. harms"

Martin Hilbert is Professor at the University of California, Davis, where he chairs the campus wide emphasis in Computational Social Sciences. He studies the societal implications of digitalization in complex social systems and has become increasingly concerned about the downsides of digital tech. He holds doctorates in Economic and Social Sciences (2006),

and in Communication (2012). His work is recognized in academia for the first study that assessed how much information there is in the world; in public policy for having designed the first digital action plan with the governments of Latin America and the Caribbean at the United Nations; and in the popular media for having alerted about the intervention of Cambridge Analytica in the campaign of Donald Trump a year before the scandal broke. Before he joined academia he served as Economic Affairs Officer of the United Nations Secretariat for 15 years, where he created the Information Society Program for Latin America and the Caribbean. Prof. Hilbert has provided technical assistance in the field of digital development to more than 20 countries and dozens of publicly traded companies as digital strategist. His work has been published in the most recognized academic journals, such as Science, Psychological Bulletin, Trends in Ecology and Evolution, and World Development, and regularly appears in popular magazines, including The Wall Street Journal, Washington Post, The Economist, NPR, BBC, Die Welt, among others

MEET OUR SPEAKERS: FOCUS TALKS



Steven Dow

University of California, San Diego

"Advancing Systems for Community-Driven Creativity"

Steven Dow is an Associate Professor of Cognitive Science at UC San Diego, Director of the ProtoLab research group, and a member of the Design Lab. Steven conducts research on human-computer interaction, social computing, and creativity and seeks to improve communities' abilities to creatively solve challenges. Steven received the National Science Foundation CAREER Award in 2015 for research "advancing collective innovation." He has received six NSF grants, a Google

Faculty Grant, a Yankelovich Center for Social Science Research Award, Stanford's Postdoctoral Research Award, and a Hasso Plattner Design Thinking Research Grant. Steven was on the faculty in the HCI Institute at CMU from 2011-2015. He holds an MS and PhD in Human-Centered Computing from the Georgia Institute of Technology, and a BS in Industrial Engineering from University of Iowa.



Robin Queen

University of Michigan, Ann Arbor

"We are tiny pieces of shit': How fictional audiovisual media highlight the role of sociolinguistic cognition for understanding the performative power of taboo words"

Robin Queen is an Arthur F. Thurnau Professor of Linguistics, German and English, and currently serves as the chair of the Department of Communication and Media at the University of Michigan, USA. Her research focuses on different strands of sociolinguistics, including language and social cognition; language and identities; language

contact, land language as social action. Her 2015 book, Vox Popular: The Surprising Life of Language in the Media (Wiley-Blackwell), explores the many ways that language variation proves integral to the unfolding of fictional audiovisual media. When not acting as an academic, she lives on a small farm with her spouse and a lively band of critters large and small.

MEET OUR SPEAKERS: FOCUS TALKS



Lindsay Bowman

University of California, Davis

"Building a Social Brain: Caregiver contributions to infant brain and social-cognitive development"

Dr. Lindsay Bowman is an Assistant Professor of Psychology at the University of California, Davis, and Principal Investigator of the Brain and Social Cognition (BASC) Lab. She received her Ph.D. from the University of Michigan in Developmental Psychology. With experience as a post-doctoral researcher at the University of Maryland Child Development Lab and a research fellow in the Labs of Cognitive

Neuroscience at Harvard Medical School and Boston Children's Hospital, her work brings together unique perspectives on neuroscience, cognition, social understanding, and development. Her lab uses a combination of neuroscientific and behavioral methods to understand how cognition develops over childhood, and how these early developments set the course for social success. Her most recent work focuses on investigating the neural correlates of social cognition in live-interactive settings.



Hyowon Gweon

Stanford University

"Inferential social learning, outwards and inwards: Thinking, learning, and communicating about the self"

Hyowon Gweon is an Associate Professor in the Department of Psychology at Stanford University. She has been named as a Richard E. Guggenhime Faculty Scholar (2020) and a David Huntington Dean's Faculty Scholar (2019), and currently serves as the Director of Graduate Studies for the Department of Psychology and the Symbolic Systems Program. Hyo received her PhD in Cognitive Science (2012)

from MIT, where she continued as a postdoc before joining Stanford in 2014. Hyo is broadly interested in how humans learn from others and help others learn. Taking an interdisciplinary approach that combines developmental, computational, and neuroimaging methods, her research aims to explain the cognitive underpinnings of distinctively human learning, communication, and prosocial behaviors.

MEET OUR SPEAKERS: FOCUS TALKS



Douglas Guilbeault

University of California, Berkeley

"How communication networks promote cross-cultural similarities: The case of category formation"

Douglas Guilbeault is an Assistant Professor in the Management of Organizations Group at the Haas School of Business. He studies how communication networks underlie the production and diffusion of cultural content, such as linguistic categories and social norms. This investigation extends to how communication dynamics are shaped by various

sources of influence, such as organizational culture, political messaging, and the design of social media platforms. His work on these topics has appeared in a number of top journals, including Nature Communications, The Proceedings of the National Academy of the Sciences, Management Science, and Cognition, as well as in popular news outlets, such as The Atlantic, Wired, and The Harvard Business Review. Guilbeault's work has received top research awards from The International Conference on Computational Social Science, The Cognitive Science Society, and The International Communication Association. He is faculty co-director of the Berkeley-Stanford Computational Culture Lab, and he is a recent recipient of Stanford's "Art of Science" prize for his piece, "Changing Views in Data Science over 50 Years," produced in collaboration with the research collective, compsyn ("Computational Synesthesia").

POSTER PRESENTERS

Emili D'Amico, Cindy Dang, UC Irvine

Religion and Processing of Significant Life Events by Mothers of Children with Down Syndrome

Nicole Lea, Dominican University of California Feathered Friends: The Positive Effects of Owning a Companion Bird

Manya Zhao, UC Berkeley

Topography of L4 Barrels in Somatosensory Cortex of SCN2a Loss-of-Function Model of Autism

Nathan Roll, UC Santa Barbara
Prosodic Feature Detection in Multi-Accent Speech

Tanner O'Brien, Elham Baharlouei, Huu Duc Vo,

San Jose State University

Exploring the Effects of Congruent Sounds During Visual Search

Elena Kao, UC Irvine

Examining whether the Gender of Campaign Organizers on www.gofundme.com is Associated with Language Use and Measures of Campaign Success

POSTER PRESENTERS

Ashvini Varatharaj, UC Santa Barbara How do we learn to talk about our emotions?

Remy White, Alex Tam, UC Berkeley Children Use Confidence as a Metric to Rationally Integrate Beliefs

Soorya Sankaran, UC Santa Cruz Non-Conscious Multi-Sensory Integration Revealed in the Ventriloquist Effect

Yifei Chen, UC Berkeley Explicit Strategies Elicited by Scalar and Sensory Feedback

Abigail Kemalyan, Xavier Banson, UC Berkeley Associations Between Childhood Family Stress and Primary Emotion Regulation Strategies

Kaylee Davis, UC Merced Determinants of Robot Trust in Emergency Scenarios

Amy Jain, UC Berkeley

Monetary stimuli (including cryptocurrency) as a potential risk factor for developing sex-biased neurodegenerative conditions

BINGO

Ask fellow conference attendees if they fit into any of the below categories and have them initial in the corresponding square! Complete one bingo for a raffle ticket and complete the full board for a second ticket.

Vegetarian	Has the same hobby as you	Has touched a brain	Has studied abroad
Has lived outisde of California	Born in the same month as you	Traveled to another country in the past year	Same favorite CogSci discipline as you
Has changed their major	Has the same number of siblings as you	Enjoys meditation	Drinks coffee everyday
Has a pet	Attended/ is attending a different school	Speaks 2+ languages	Has never used Chat GPT

A SPECIAL THANK YOU TO CSSA INTERNAL MEMBERS

* = denotes Committee Head

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<u>Allira Bellawala</u> (Co-President)
<u>Hannah Hansraj</u>
(Conference Director)

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ABOUT THE COGNITIVE SCIENCE STUDENTS ASSOCIATION (CSSA)

The Cognitive Science Students Association at UC Berkeley is an undergraduate organization at UC Berkeley. Our mission is to support and enrich the academic life of anyone interested in the interdisciplinary field of cognitive science. We strive to build a sense of community for those passionate about the field and provide them with valuable opportunities for personal, academic, and career development.

The CSSA regularly coordinates academic events such as guest lectures and information sessions; plans social events like professor-student dinners and cogsci themed gatherings; and works with faculty and university officials to provide assistance for students. Additionally, the CSSA has an educational outreach program and organizes the annual California Cognitive Science Conference.

Learn more about the CSSA at <u>cssa.berkeley.edu</u>. Contact us at <u>cssa.berkeley@gmail.com</u>

SPONSORS

The CSSA would like to express our sincerest thanks to the following sponsors for helping to make our conference possible and supporting the interdisciplinary mission of cognitive science.

UC Berkeley Cognitive Science Program



Organizing CCSC is no easy feat—from booking the venue to flying in speakers, a lot of planning and creativity is involved in order to provide our community with an incredible and enriching experience. All funds raised will be allocated to organizing next year's conference, and your support is essential to the execution of our event. Every dollar counts and we appreciate your support! All donations through crowdfunding are tax-deductible. Scan the QR code to visit our Crowdfunding page and support us!

This conference would not be possible without generous donations from our sponsors. If you or your organization are interested in sponsoring this conference in the future, please reach out to our email: cssa.berkeley@gmail.com