



# COGSCI'19

*Creativity+ Cognition+ Computation*

24 - 27 JULY 2019 MONTREAL, CANADA

Invited Speakers

Elizabeth Churchill | Mary Lou Maher | Takeshi Okada

Co-Chairs

Ashok Goel | Colleen Seifert | Christian Freksa

# Introduction

Dear Cognitive Science Colleagues,

Welcome to the 41st Annual Conference of the Cognitive Science Society in Montreal, Canada! Our meeting brings together some of the most innovative and exciting research in Cognitive Science today, and highlights the conference theme of *Creativity + Cognition + Computation*.

In addition to the Rumelhart Prize presentation by Michelene Chi and the Carvalho-Heineken Prize presentation by Nancy Kanwisher, the program features three plenary speakers: Elizabeth Churchill (Google Research), Mary Lou Maher (University of North Carolina), and Takeshi Okada (University of Tokyo). Further, the program includes the Jacobs Foundation Symposium, *How Curious? The Need for Exploration and Discovery*, as well as an invited symposium on *Creativity in the Arts* in addition to the Rumelhart Symposium on *Translation Research in STEM Learning* and the Glushko Ph.D. Dissertation Awards Symposium. These invited symposia and talks showcase the conference theme.

The program committee for CogSci 2019 received 1110 submissions, including 810 full papers, 256 member abstracts, 13 publication-based short papers, as well as 14 proposals for symposia, 10 for workshops, and 8 for tutorials. After a rigorous review process, the committee selected 202 papers for oral presentation and inclusion in the conference proceedings (25%), 306 papers for poster presentation and inclusion in the proceedings (38%), and 163 papers for poster presentation with inclusion of abstracts in the proceedings (20%). We also selected 204 submitted member abstracts and accepted another 19 abstracts from full paper submissions as invited member abstracts. In addition, we accepted 12 publication-based talks, 10 symposia, 7 workshops, and 4 tutorials to make for a very rich and inclusive program.

We hope that you enjoy the program this year as well as the beautiful city of Montreal!

Your Program Co-Chairs,  
Ashok Goel (Georgia Institute of Technology, USA)  
Colleen Seifert (University of Michigan, USA)  
Christian Freksa (University of Bremen, Germany)

# **Socio-economic related differences in the use of variation sets in naturalistic child directed speech. A study with Argentinian population**

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## **Abstract**

Child-directed speech (CDS), compared to speech between adults, shows a higher amount of repetitiveness, particularly of sequences of utterances with self-repetitions. This phenomena, known as variation sets, has been found to be beneficial for learning. Although previous findings indicated socio-economic status (SES) effects on the quantity of variation sets, they were based on data from child-parent dyadic interactions in play situations. Given that SES comprises interrelated factors affecting childrens quotidianity, here we examine SES effects on the use of variation sets in long recordings of the family naturalistic environment of 30 low and middle SES Argentinian children (8 to 20 months). Variation sets were automatically extracted from CDS provided by all the participants. Results demonstrated the effects of two factors related to SES-differences: while parents education showed a positive relation to the quantity and extension of variation sets, the number of people living in the household influenced it negatively.