Toyota Research Institute Launches Research Into Understanding and Predicting Human Behavior for Decision Making

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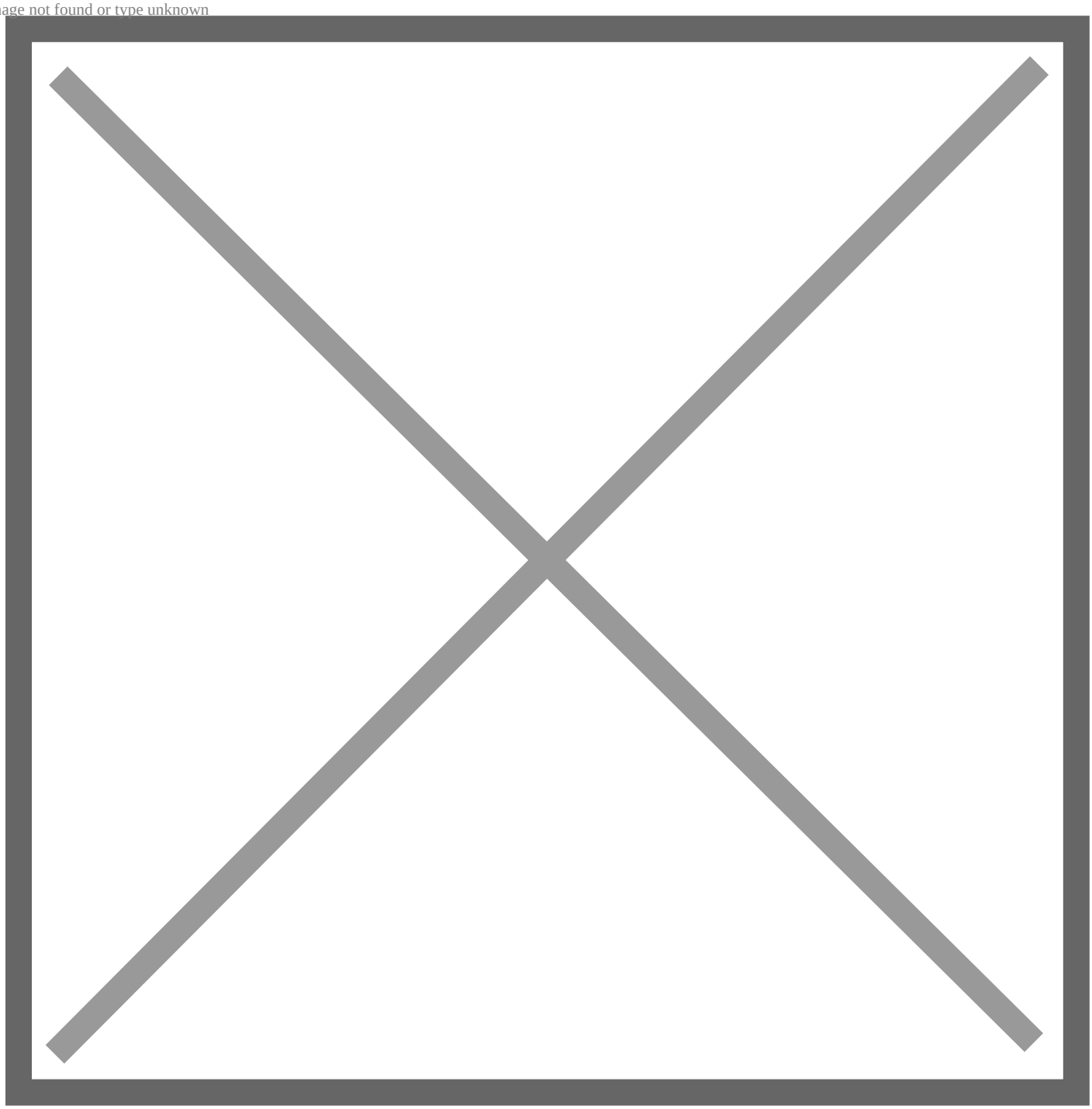

LOS ALTOS, Calif., March 25, 2020 – The Toyota Research Institute (TRI) is expanding its exploratory research with the launch of Machine Assisted Cognition (MAC), a new initiative to develop and demonstrate artificial intelligence tools that can understand and predict human behavior in the context of decision making.

“A key pillar of TRI’s charter is to explore ‘what’s next’ for Toyota, and MAC is another way TRI can apply its AI expertise to help humans perform better,” said Eric Krotkov, TRI’s Chief Science Officer. “Our vision is to create a human amplification system for Toyota where people and machines work together synergistically to make better predictions, forecasts and business decisions, and do so more quickly.”

MAC is envisioned to be scalable, leveraging the size of the available data or decision-making group. TRI also believes it is essential to respect principles of transparency and privacy in the collection and usage of data.

TRI has hired Franziska Bell as Senior Director to manage the MAC program. She is presently hiring a new team of interdisciplinary researchers including behavioral scientists and will have oversight of the Accelerated Materials Design and Discovery (AMDD) program led by Brian Storey. Bell joins TRI from Uber where she served as the Head of Platform Data Science and created working teams around forecasting, anomaly detection and conversational AI.

The MAC team will initially build and test fundamental capabilities. They will pursue use cases that could have a generally applicable solution for many different business functions. Once a proof of concept has been developed, the group will explore specific capabilities that can support the needs of Toyota users in different parts of the organization such as sales, product planning, engineering and R&D. Furthermore, TRI hopes that MAC will also contribute to a deeper understanding of human behavior so as to improve society.

Throughout its history, TRI has engaged with university partners to conduct sponsored research in artificial intelligence. As additional support for the MAC research, TRI will engage academic collaborators on joint research projects. Partners and projects will be determined at a later date, but the focus will be on achieving breakthroughs around difficult technological challenges.