THE COGNITION AND NEUROCOGNITION OF DESIGNING

Recent advances in cognitive science and neurocognition through non-invasive brain measurements coupled with a dramatic reduction in their cost has made it possible to look inside minds and brains. This talk will present what happens in the minds and brains of designers as they design. It draws from cognitive and neurocognitive studies of architects, engineers and industrial designers while they design.

It presents answers we have learned to questions such as:

- is design fixation discipline specific?
- is design thinking discipline specific?
- what happens when you collaborate with an AI?
- do design tools change the mind and brain activities of the designer using them?
- are there differences in the mind and brain activities of different design disciplines?
- do brain activities correlate with design theory?
- can your brain response be used to improve your ideation?
- what does ChatGPT do to your brain responses?

Bio

John Gero is the Research Professor in Psychological and Brain Sciences at Drexel. He is the former Professor of Design Science and Director of the Key Centre of Design Computing and Cognition at the University of Sydney. He has been a Visiting Professor of Cognitive Psychology, Design and Computation, Architecture, Mechanical Engineering, Civil Engineering, Artificial Intelligence, Computer Science, and Computational Social Science at MIT, Columbia University, UC-Berkeley, UCLA, CMU, INSA-Lyon, University of Strathclyde, EPFL, University of Provence, GMU and UNCC. He is the author/editor of 57 books and has published some 800 research papers with over 32,000 citations and an h-index of 81.

John S. Gero

Research Professor
in Psychological and Brain Sciences

Drexel University

Le 5 février 2026

de 14h à 15h45

en salle de colloque 1
du bâtiment multimédia
du site 29 avenue R. Schuman
13621 Aix-en-Provence

&
En zoom

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