

Engineering Design Cognition and Computation

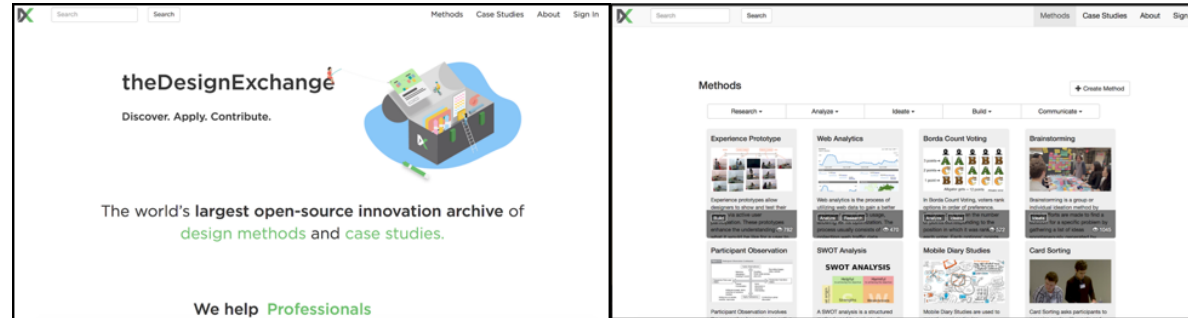
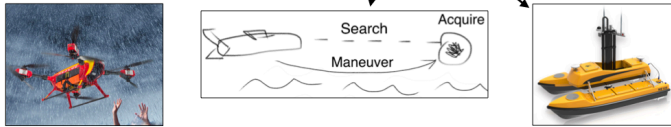
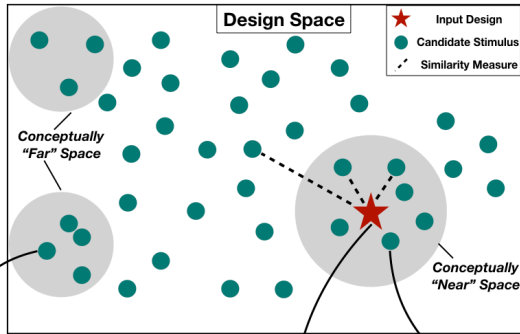
Professor Kosa Goucher-Lambert

▪ Design Methodology ▪ Product Design ▪ Human Computer Interaction ▪ Neuroimaging ▪ Computational Modelling ▪ Creativity and Ideation

We are interested in understanding how humans and computers design. We use that information to develop novel methods and tools to improve the design process.

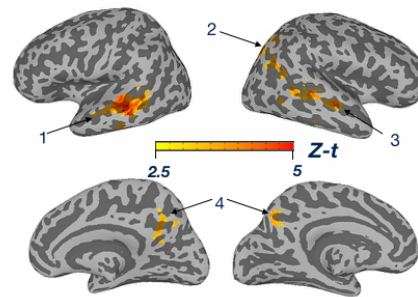
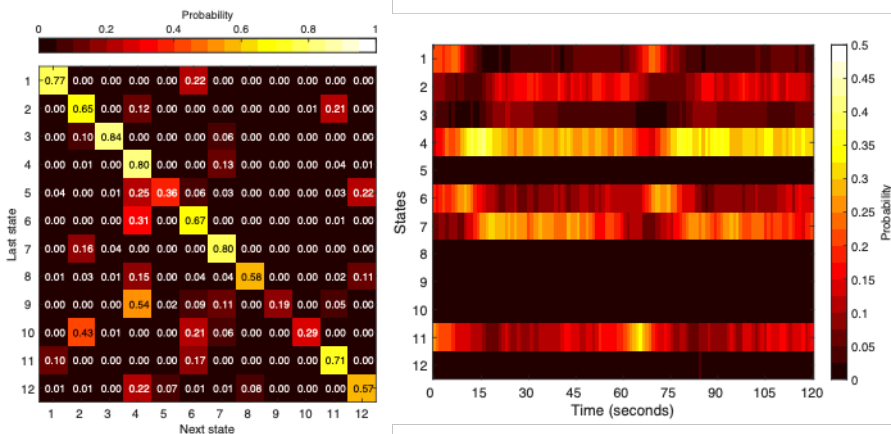


@kosagl
www.kosagl.com
email.kosa@berkeley.edu



Design Methodology: We help maintain the world's largest open-sourced collection of design methods and case studies (theDesignExchange.org)– and use it to teach and study design at scale.

Human-AI Symbiotic Design: We develop methods and tools that enable humans and AI design teams to search for design examples using mixed inputs like text, sketch, and voice.



Design Neurocognition: We conduct Neuroimaging (fMRI) studies of humans designing, and construct computational models to gain fundamental brain-based insights related to design.



Sustainability and User Preference: Life cycle assessment methods and constructing mathematical models of user preference. We model what designs people prefer and automatically generate new ones to meet their desires.