

# Computational Aesthetics: Generative Art and Aesthetic Measurement

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## ABSTRACT

In this talk, we will first introduce the interdisciplinary research topics of computational aesthetics and aesthetic computing, and discuss their difference and complementary roles. Based on a 4-level classification in terms of computational power utilized for computer generated art, we present a recent project on automatic generation of the well-known styles of Kandinsky's abstract paintings, using the programming language Processing. Using random generation, every styled image generated can be unique. Other generative art results on Pollock, Kandinsky, Miro, and Picasso, and Kandinsky Fonts are also mentioned. We also introduce our recent attempt in measuring the aesthetics of Chinese ink paintings and logo designs. Finally, we will sample a few projects in information visualization, with demos.



### Short Biography:

Kang Zhang is Professor and Director of Visual Computing Lab, Department of Computer Science, and Professor of Arts and Technology, at the University of Texas at Dallas. He is currently a Fulbright Distinguished Chair visiting Charles University. Zhang received his B.Eng. in Computer Engineering from University of Electronic Science and Technology of China in 1982, Ph.D. from the University of Brighton, UK, in 1990, and Executive MBA from the University of Texas at Dallas in 2011. Prior to joining UT-Dallas, he held academic positions in the UK, Australia, and China. Zhang's current research interests include generative art, visual languages, aesthetic computing, and software engineering; and has published 7 books, and over 240 papers in these areas. He is an ACM Distinguished Speaker and on the Editorial Boards of *Journal of Big Data*, *The Visual Computer*, *Journal of Visual Languages and Computing*, *International Journal of Software Engineering and Knowledge Engineering*, and *International Journal of Advanced Intelligence*. His home page is at: [utd.edu/~kzhang](http://utd.edu/~kzhang).



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