The Fusion of Glazes Color in Random Forest

Chen, Jo-Ya (School: Kaohsiung Municipal Kaohsiung Girls' Senior High School)

A layer of glaze is attached to the surface of ceramics. This study uses the glaze as a medium and integrates the machine learning theme of information engineering to predict the results of the glaze after firing. From the public website of pottery glazes and the self-made test pieces, filter the glaze formula and picture color code to establish a database, and then simulate and model the formula results before firing. Using the glaze preparation technology and materials that have been developed for thousands of years, in the plug format, one-dimensional two-dimensional ... common ways of adjusting the proportion of glaze and recording a large number of glaze databases at the same time, combined with modern scientific and technological analysis methods to quickly simulate the appearance of finished products, which can be applied in the future. It also has high artistic value and practicality in the color correction of glaze in the ceramic tile or glaze industry. Glaze has high artistic and commercial value. This work is based on the algorithm of Oriental traditional skills combined with modern machine learning. The establishment of the database is used to combine the experience of many ceramic artist-made glaze to achieve the glaze burning after the glaze. Therefore, the foreign development of this work is greatly forward-looking.

Awards Won:
Second Award of $2,000