

# CONFERENCE PROCEEDINGS



## **2023 5th International Conference on Applied Machine Learning (ICAML)**

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# 2023 5th International Conference on Applied Machine Learning (ICAML) **ICAML 2023**

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## **Design of Modeling Elements of Luoshan Shadow Puppets Creative Goods Based on Deep Learning**

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### **Abstract**

The application of Luoshan shadow puppet elements in creative goods can break through the single communication path of shadow play and make the communication process of Luoshan shadow play art more vivid and 3D. In this paper, based on the design of modeling elements of mountain shadow puppets, the characteristics of visual elements of shadow puppets creative goods are analyzed, and an intelligent design algorithm of shadow puppets creative goods based on deep learning (DL) is innovatively proposed. Based on the design of modeling elements of Luoshan shadow puppets, this paper analyzes the characteristics of visual elements of shadow puppet creative goods, puts forward an intelligent design algorithm of shadow puppet creative goods based on DL, and explores the computer-aided shadow puppets modeling design strategy driven by artificial intelligence. The results show that the F1 value of the algorithm is about 94%, and the efficiency of the algorithm is high. The validity and reliability of the method in this paper are effectively verified by the test, which provides a reliable and efficient method for the design of modeling elements of Luoshan shadow puppet creative goods.