

## **Infant hungry recognition based on k-NN and Autoregressive Model**

### **Abstract**

To study their behaviour without knowing what their needs is another crucial issue. A lot of researches have been rapidly investigated. Thus, in this paper we proudly proposed a system to determine the hungry infant based on their facial expression. A Haar Cascade face detection method was implemented. Autoregressive Model (AR) was employed for the coefficient extraction. Some other statistical methods were used as the feature extraction. Finally k-Nearest Neighbour (k-NN) with 96.78% accuracy was accepted.

### **Keywords**

AR model; Infant hungry recognition; K-NN