

Detection System Based on Mixed Recognition of Gesture and Speech

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Abstract—In view of the shortage of traditional visual acuity detection, the shortage of visual acuity detection instruments, the time consuming and the lack of integration, we designed and realized the intelligent visual acuity detection system. The system realizes the detection of human vision by gesture and speech mixed recognition technology. The system includes edge acquisition equipment, gesture and speech recognition, cloud-side cooperative data processing and voice broadcast. Through Cloud platform to develop algorithm skills, using edge equipment for model deployment and data acquisition. According to the visual icon on the display screen E the subjects make corresponding gestures or voice answers. The edge device converts the collected data information to the cloud, and the display displays and broadcasts the visual information. The system saves the manual detection of routine medical treatment, is convenient, accurate, time-saving and labor-saving, carries on the archiving and the big data analysis to the visual acuity information, realizes the visual acuity detection integration, the intelligence, simultaneously carries on the dynamic gesture speech interaction, increases the interest, is easier to popularize.

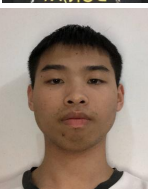
Keyword—big data analysis, cloud-end collaboration, hybrid recognition, vision detection



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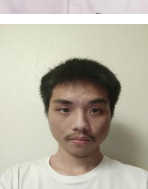
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