

Expression Recognition Algorithm Enhancements for Students Who Integrate Artificial Intelligence Games into Classrooms to Gain Sensitivity

Minyu Sun
School of Marxism
Changzhou College of
Information Technology
Changzhou
Jiangsu,213164, China

Abstract: This paper proposes an evaluation index system for students' learning performance in colleges and universities, which is composed of 16 indicators in four categories with the integration of artificial intelligence games into the classroom as the basic framework. In terms of functions and evaluation, the theoretical structure and analysis path have been improved. Guided by the improvement of residents' sense of acquisition, the index of students' sense of acquisition is selected. Combining the three-dimensional learning state space with the emotional dimension theory, by analyzing the students' expressive states in the pleasant dimension, combined with the intensity of arousal and valence, an effective classroom state division method is realized, based on behavior theory.

Keywords: Expression Recognition Algorithm, Integrate Artificial Intelligence, Classrooms to Gain Sensitivity

1. INTRODUCTION

With the development of the social economy, the gradual establishment of the market economy, and the increasingly fierce social competition, the requirements for the comprehensive quality of college students [1] are increasing. Therefore, the learning effect of students during school is increasingly important. Face expression recognition generally includes three parts: face localization, facial feature extraction and expression classification [2]. The information technology classroom is a platform for implementing artificial intelligence education. The author uses his own understanding and practice of artificial intelligence to explore with the teaching case of the lesson "Zoo Quest - "Curve" Tool" [3]. One of the difficulties in this research is how to extract It can generate complete, robust, compact and discriminative expression features to improve the classification accuracy [4].

In recent years, there have been many methods for recognizing expressions in static images. For this reason, our school has tried to introduce the "Wukong" [5] intelligent educational robot into the classroom, aiming to cultivate people with morality, combining artificial intelligence with teaching and cultivating students' healthy lifestyle [6], to improve students' scientific literacy. Sandbox Game, a game type of its own, the core of the game is "creating and changing the world", the game is usually non-linear, does not force the player to complete the main goal [7], the player can play a role (the protagonist or creator), interact with a variety of environmental elements in the game, and create things to change the world. The Education Informatization 2.0 Action Plan (abbreviated as the 2.0 Action Plan) [8] is an inevitable choice to adapt to the development of education in an intelligent environment, and a specific implementation plan to promote "Internet + Education" [9].

In the 2.0 action plan, it is proposed that information technology and intelligent technology should play a role in the whole process of education [10]. Enhancing the sense of achievement of the common people is not only the core task of the work of the Party Central Committee and the

government, but also the focus of attention from all walks [11] of life in our country. It not only reflects our country's positive response to the fundamental interests and vision of the masses, but also reflects the grand goal of building a moderately [12] prosperous society in an all-round way: the more concentrated the energy, the greater the weight of the regional center [13], the closer to zero. When the energy is completely concentrated on the center point, that is, only the most central weight is 1, and the others are zero [14]. This filter has no effect on the image and has no denoising effect [15].

The early automatic recognition of micro-expressions mainly focused on how to distinguish micro-expressions and macro-expressions [16]. Tomas Pfister was one of the earliest scholars to try micro-expression recognition. In the early days, Tomas Pfister et al. [17] found that CLPB-TOP (associated completed LBP) operator. Student learning performance evaluation is to use scientific means and methods under the guidance of certain values [18] to judge the learner's learning premise, learning state and learning effect, so as to optimize learning activities. The goal of facial feature extraction It is to extract the features that can well represent the expression changes. Before feature extraction [19], the input facial expression image needs to be pre-processed, including denoising, face detection, face region geometric normalization, grayscale normalization and localization of table feature regions [20].

This is not only the basic part of the "Paint" software, but also the supplement and deepening of the pencil tool, the "Brush" tool [21], and the color fill tools. "Wukong" is an intelligent educational robot that is popular with students, lively and highly interactive. It can say and jump, and it has a display screen in the eye area [22], which can show various expressions. When you say "Goku, Goku, sleep" to it, it will squat and make a dormant posture. MZ World is based on "My The community built by the world. This sandbox gameplay offers endless possibilities [23]. In addition to the building challenges, it enables students to conduct online

research, which is then presented through the construction of scenes in the play space [24].

Students can also explore digital citizenship by building virtual micro-communities in the game that correspond to high school [25]. It shows that learners' academic mood can significantly affect their learning effect, but further research is still needed to optimize these research results [26]. Domestic scholars have shown through research that academic emotion is an important non-intellectual factor that affects students' academic performance [27].

2. THE PROPOSED METHODOLOGY

2.1 The Artificial Intelligence Games Integrated into the Classroom

The evaluation of course teaching effect in my country's colleges and universities mostly adopts the method of comprehensive calculation of comprehensive score of expert evaluation, student evaluation, peer evaluation and self-evaluation. The comprehensive score is the basis for measuring the teaching effect of the course. The teaching object of this class is fourth grade students. They have a strong interest in information technology courses. The students are already familiar with the interface of the "Paint" software, and have mastered the selection of foreground and background colors. The author uses the sound sensor to the principle is to use a noise detector to obtain the size of the noise, so that students can understand that noise refers to the sound that is too loud and endangers human health, which will form noise pollution and bring adverse effects on people's mood and the surrounding environment.

Design a study career and simulate real-life scenarios by building a university in a virtual space. And use this virtual space to realize the life experience in the real society. Of course, before organizing related activities, some norms need to be determined, and students should abide by and implement them, so as to avoid students being too immersed in it. The concept of deep learning comes from the development of computer technology and artificial intelligence. Influenced and inspired by neuroscience, and has become more and more closely related in the continuous development, the definition of artificial intelligence is proposed from the perspective of application, and the concept of deep learning is proposed from the internal operating mechanism and internal operating mechanism.

2.2 The Students Who Integrate Games Into Classrooms Gain Sensitivity

The common algorithms and typical applications of deep learning and machine learning are shown in Table 2-2: when constructing measurement indicators, the actual situation should be combined to make the indicators more specific and operational. Based on the analysis and induction of a large number of literatures about national fitness public services and residents' sense of acquisition, the researchers in my country believe that the effective behavioral characteristics of teachers' teaching are as follows: Five dimensions: teachers' teaching skills, depth and breadth of subject knowledge taught by teachers; teaching style in teaching; positive personality and psychological characteristics of teachers. In the selection area, it is easy to find that eyeballs and eyebrows are more important than other areas. It is much darker. Based on the above, the grayscale histogram of the candidate window area can be analyzed.

First, sort all the pixels in the window according to the gray value, and then select the 5% pixel with the smallest gray value as the candidate area of the eyeball. In addition, you can also add a garbage sorting game timing system, and record the records through competition. The time of the garbage sorting game, "Wukong" broadcasts the time, allowing players to improve the accuracy of their answers. That is to say, most students do not have a positive academic mood ten minutes before class and ten minutes before get out of class.

2.3 The Emotion Recognition Algorithm Enhancement for Students Gaining Sensitivity

The basic expression library is the basic database used to train the neural network, which usually consists of pictures or encoded files. In this research, the basic expression library is an important library file used to train the network after coding the artificial intelligence network. The artificial intelligence network trained by the basic expression library will realize specific functions. The specific regulations on the quality and quantity of activities are not only the basis for measuring the quality of teaching, but also the direction of teachers' teaching efforts.

According to the above description, the characteristics of Gabor filter are determined by the direction of scale v and μ , and a series of scales v and direction μ can be selected to obtain a set of Gabor filters, which is called a Gabor filter bank. Let artificial intelligence enter the primary school information technology classroom. As a teacher, you should first familiarize yourself with the relevant applications of artificial intelligence technology, and think about how to infiltrate artificial intelligence into the classroom skillfully. Teach students how to organize from four aspects, including: entering the door Put shoes in the shoe cabinet, tidy up the desk after finishing the homework, return the toys, get up and make the bed in time, etc., so that the students can reproduce the life scene and learn the method of tidying up. Through the process of human-computer interaction, students can complete the work independently from the past The homework becomes training the AI with what it has learned. Throw away the passive learning style of doing homework and evolve into actively exploring the joys of teaching and learning to discover your own shortcomings and improve them. The various organizations of the national fitness public service are independent of each other and lack contact with the old Sichuan. For example, there is a lack of connection between official mass fitness organizations managed by the government and spontaneous non-governmental mass fitness organizations, and the division of labor is unclear.

3. CONCLUSION

Artificial intelligence technology has become more and more popular in daily life, but it is still in its infancy as a curriculum to enter primary schools and needs further practical exploration. More importantly, teachers should integrate artificial intelligence into campus life through various activities, a facial expression recognition algorithm based on brightness detection and SVM. Experiments show that the algorithm can effectively extract feature vectors related to expression changes, with a high recognition rate and easy automation. On this basis, it is enriched, and it is proposed to measure the sense of gain from the three varieties.

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