

基于 Web 网络的身份识别系统的设计与实现

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摘要: 当前身份识别系统大多采用密码识别技术, 容易被窃取或遗失, 导致用户有一定的损失, 识别精度较低. 为此, 设计了一种新的基于 web 网络的身份识别系统, 主要由浏览器端录音模块、声纹数据传输模块和声纹训练及识别模块构成. 给出系统架构, 依据系统架构在浏览器端安装一个 Activex 录音控件, 对用户的语音进行录制. 通过预加重、端点检测等方式对声纹信号进行预处理. 对声纹信号进行特征值提取, 通过信号转换过滤信号中没有用的部分, 提取出能够体现用户录制语音本质属性的特征参量, 依据提取特征值得到 D 值, 通过 D 值实现身份识别. 实验结果表明, 所设计系统有很高的识别精度.

关键词: web 网络; 身份识别; 系统; 设计

Identification System Based on Web Network

Design and Implementation

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Abstract: The current identification system mostly USES the password identification technology, easy to be stolen or lost, leading to loss of users have a certain, the identification accuracy is low. To this end, we design a new network identification system based on web, the designed system is mainly composed of browser side recording module, voice print data transmission module and voiceprint training and recognition modules, system architecture is given. Based on the system architecture in the browser to install an Activex controls, recording on the user's voice recording. Through the pre-emphasis, endpoint detection methods such as the voice print signal preprocessing. Characteristic value of voiceprint signals are extracted through the signal conversion to filter the useless part of the signal, to extract the characteristic parameters of essential attributes can reflect user recording voice, according to the feature extraction is worth to D value, through the D value identification. The experimental results show that the designed system has a high recognition accuracy.

Key words: web network; identity; system; design

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