基于 DHKE 的二维码技术

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摘 要：二维码技术的出现方便了大众，但由于其制作过程开放，导致许多二维码成为木马、病毒等的藏身之处.这样的二维码一旦被用户扫描，就会将危害传播给扫描者.然而当前的二维码技术却无法对二维码的来源进行识别，因此本文通过分析 QR 码的编码方式和工作原理，总结了当前常见的二维码存在的安全隐患，并提出了基于 DHKE 的二维码技术.实验证明，基于 DHKE 的二维码技术可以识别二维码的来源，有效地阻止用户扫描一些非法二维码，提高了二维码技术的安全性.

关键词：二维码；身份识别；DHKE；安全隐患；QR 码
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The 2D Code Technology Based on DHKE

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Abstract： The emergence of 2D code technology is convenient for the public, but it become the hiding place of Trojans, viruses, etc because of its open production process. Such a two-dimensional code is scanned by the user once, it will spread the hazard to the scanner. However, the current two-dimensional code technology can not identify the source of two-dimensional code. Therefore, this paper analyzes the encoding mode and operational principle of QR code, summed up security risks of the current common two-dimensional code, and the QR code based on DHKE is presented. The experimental proof that the QR code based on DHKE can identify the source of two-dimensional code, effectively prevent users from scanning some illegal two-dimensional code, and improve the security of the two-dimensional code technology.

Key words： two-dimensional code； identity recognition； DHKE； hidden danger； QR code

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