

## 基于 RSA 与 MD5 签名的实名制微门户设计

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**摘 要:** 以西安交通大学“互联网+”校园建设为背景, 解决传统微信应用服务单一且无法获取校内用户真实隐私数据问题, 设计并实现了基于 RSA 与 MD5 签名的实名制校园微门户系统. 提出在校内本地服务器上绑定微信用户的 OpenID 和校内统一身份认证系统的 CAS NetID 实现校内用户真实身份校验; 通过 RSA 加密与 MD5 数字签名实现用户敏感数据保护; 通过高度的校内系统集成, 实现微门户服务综合一站式. 应用结果显示, 移动用户通过微信客户端一键关注西安交通大学官方微信即可享受微门户综合服务; 通过实名绑定可获取基于用户真实校内身份与角色的敏感数据访问.

**关键词:** 微信; 一站式; 门户; 跨平台; 互联网+; 统一身份认证(CAS); RSA; MD5

## Design of a Real-name WeChat Portal Based on

### RSA and MD5 Signature

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**Abstract:** To solve the problem that traditional WeChat applications can not provide comprehensive service for campus users based on their real identities or roles, a real-name WeChat portal with RSA and MD5 signatures was proposed to satisfy the mobile users in university campus. In this portal, a mechanism about binding OpenID of WeChat and NetID of CAS (Central Authentication System) was designed to realize the real-name identity authentication. To protect the private information, RSA and MD5 signatures were utilized during data transmission. To provide the comprehensive one-site services, all the campus service data used by portal were integrated based on the related campus systems. After testing and running this system in two months, the statistic reports show that it can provide comprehensive one-site service and cross-platform service to mobile users by the WeChat clients installed in their mobile devices. Meanwhile mobile users can also access the private data based on their identities after binding their WeChat accounts and CAS accounts.

**Key words:** WeChat; one site; portal; across platform; Internet Plus ;CAS(central authentication system);RSA;MD5

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