

2017 International Conference on Public Key Infrastructure and its Applications (PKIA)

Message from General Chair

The advent of public key cryptography, in late 1970's, heralded the era of carrying out secure transactions between anonymous entities over insecure communication channels. The Internet boom brought many business opportunities for secure digital transactions, particularly in the financial, organizational sectors and in other transactions requiring legal non-repudiability or digital signatures. However, the contractual bindings of the transacting entities to the contents of the contract together with the binding of the identity of the entities required the notarization of the public key of the entities. This led to the establishment of the public key infrastructure (PKI) and various standards with respect to digital content. The current decade of developments in communication and computer technologies have led to ubiquitous nature of digital transactions between humans. Related societal changes and demands have led to restructuring of the digital infrastructures in the form of cloud computing, various applications involving citizen, business and government agencies. A further revolution is in the looming Internet-of-Things in home, office, and industrial automation systems. Future application domains span, smart vehicles, civic facilities, urban infrastructures, financial operations. The phenomena of blockchains, cryptocurrencies, privacy in cloud computing and such newer computational paradigms have led to re-defining the trust systems and trust hierarchies including current forms of PKI and future forms of trusted third party systems. New demands on the technologies of authentication, identity management, secure access and control, decentralized operations and related issues of legislation and jurisprudence warrant critical examination of existing and prospective technologies from theoretical and practical perspectives. This timely, conference brings together experts and new entrants to understand and assess the intricately interwoven issues of technology and society. The conference has striven to maintain a high quality in the form of a collection of invited and specialist presentations together with a few carefully reviewed, contributed papers.



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General Chair - PKIA 2017