MSc thesis defense presentation

Nikolaos Lamprou defends his MSc thesis

Date:	Wednesday, 06 May 2015
Time:	11:00
Location:	School of Electrical and Computer Engineering (old buildings), 1.1.31
Thesis title:	Centralized protocols and anonymous decentralized systems
Committee:	• Aggelos Kiayias • Aristeidis T. Pagourtzis • Efstathios Zachos

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Thesis abstract

In the present thesis, firstly we study the centralized protocol of the blank signature [23], a new type of signature that was published by Christian Hanser and Daniel Slamanig , in 2013,as well as the security of this scheme. The existence of centralization in the above protocol, as we will see, is a crucial part because if we ignore it, one of the participants can find a trapdoor to the protocol. Consequently we refer to the decentralized protocol of Bitcoin [3] that was published by Satoshi Nakamoto ,in 2008 ,as well as the security with which it provide us [1],[2] , and we also refer to some smart contracts [12] that has been built on top of this ,which use its decentralized character. Lastly, we refer to the new decentralized system, the Ethereum[21],[22], that was introduced by Vitalik Buterin, Gavin Wood ,in 2013- 2014 (during this thesis ,its development has been growing),which advantages it wants to achieve in comparison with the Bitcoin as well as the formal way of its function .