MSc thesis defense presentation

<u>Agamemnon Giannakopoulos defends his MSc thesis</u>

Date:	Tuesday, 28 Feb 2017
Time:	16:00
Location:	School of Electrical and Computer Engineering (old buildings), 1.1.31
Thesis title:	[Learning Poisson Binomial Distributions with Differential Privacy](#)
Committee:	• [Dimitris Fotakis](#) • [Aristeidis T. Pagourtzis](#) • [Efstathios Zachos](#)

<u>Thesis abstract</u>

This thesis tries to leverage two major research areas. The first area concerns the Distribution Learning Theory and the second the Differential Privacy. More specific, given a highly efficient algorithm which learns with ε-accuracy a Poisson Binomial Distribution we try to study its Differential Privacy property. We show that the Algorithm achieves Differential Privacy under specific circumstances (regarding PBD nature). If the PBD close to a (n,k)-Binomial form the algorithm is Differential Privacy. If the PBD is close to a k-sparse form algorithm's privacy depends on PBD cardinality.