MSc thesis defense presentation

Αγαμ■μνων Γιαννακ■πουλος
defends his MSc thesis

Date:	Τρ■τη, 28 Φεβ 2017
■ρα:	16:00
Location:	Σχολ■ Ηλεκτρολ■γων Μηχανικ■ν και Μηχανικ■ν Υπολογιστ■ν, ΕΜΠ (παλαι■ κτ■ρια), 1.1.31
Thesis title:	Learning Poisson Binomial Distributions with Differential Privacy
Committee:	• Δημ■τρης Φωτ■κης • Αριστε■δης Παγουρτζ■ς • Ευστ■θιος Ζ■χος

Thesis abstract

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.