





*Ros Imperial Thalasso*

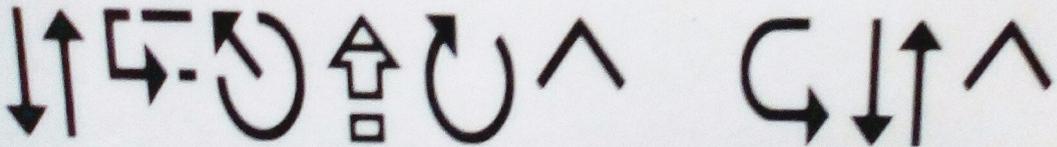
GREHOTEL HOTELS & RESORTS

RUHR  
UNIVERSITÄT  
BOCHUM



**Matthias Minihold**

# ECRYPT NET



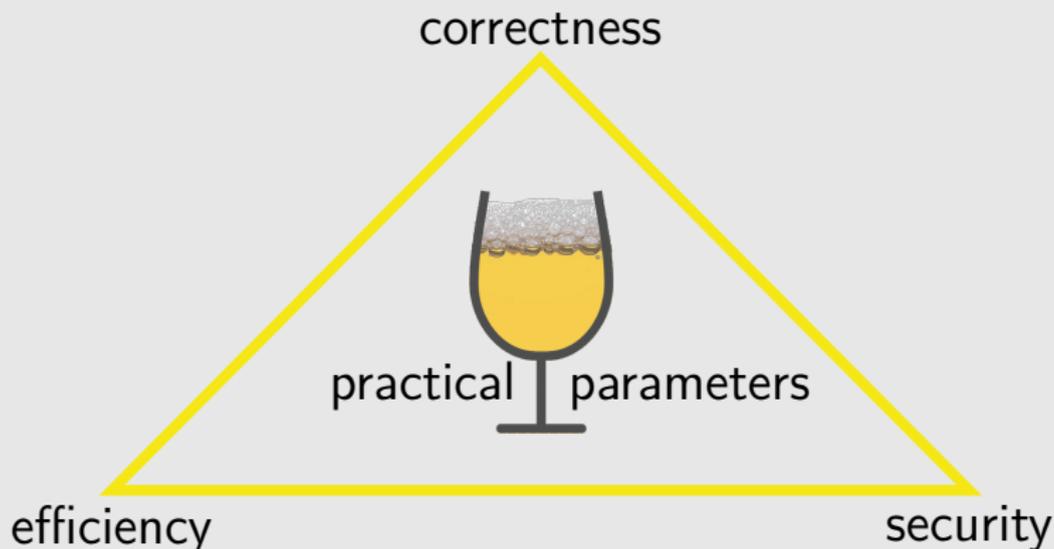
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**Practical  
Homomorphic  
Encryption**

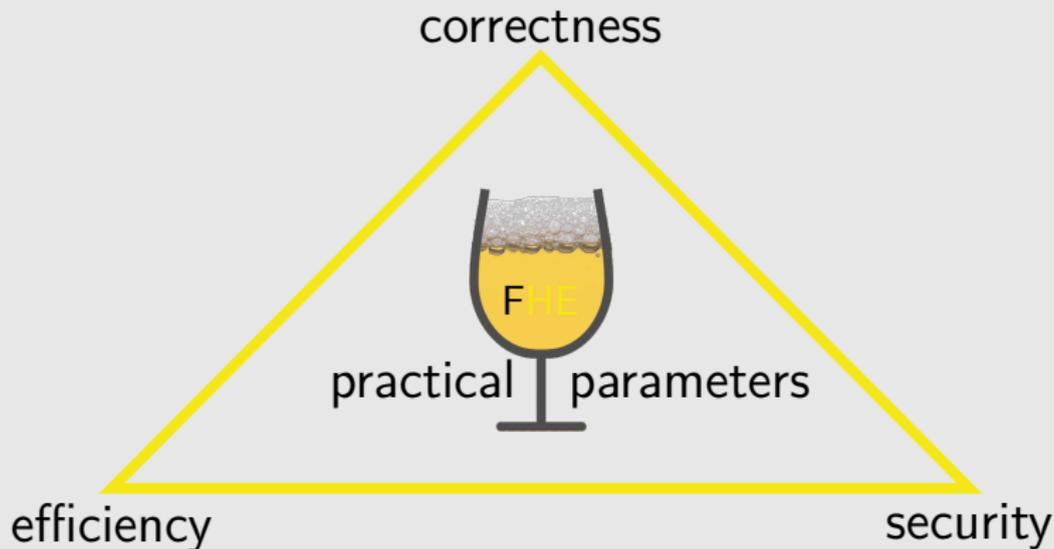
# Triangulating ...



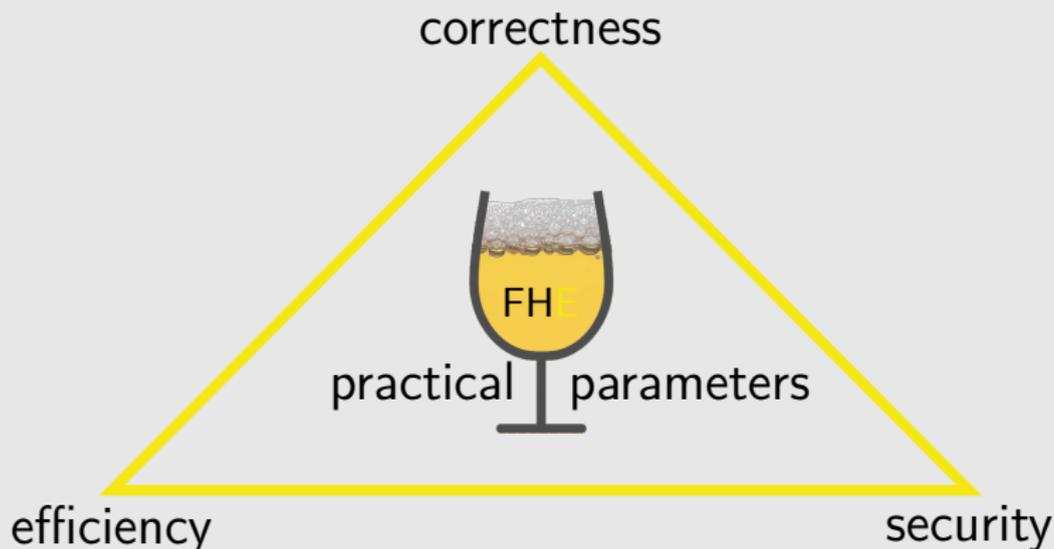
# Triangulating ... the Holy Grail



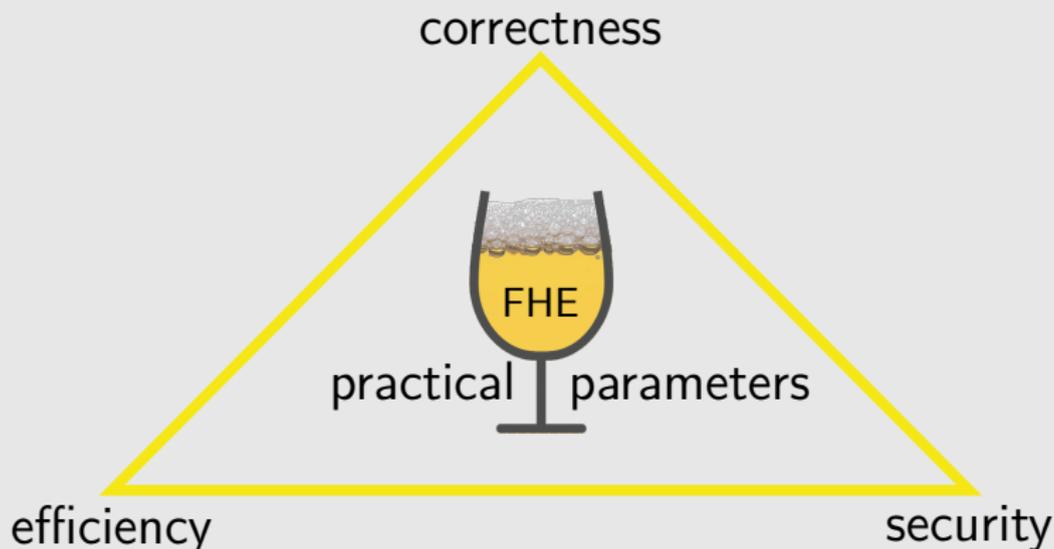
# Triangulating ... the Holy Grail



# Triangulating ... the Holy Grail



# Triangulating ... the Holy Grail



# FHE–DiNN: Practical Homomorphic Evaluation

Client



Alice holds  $sk$

Server



Artificial Intelligence  $\mathcal{AI}$

# FHE–DiNN: Practical Homomorphic Evaluation

Client



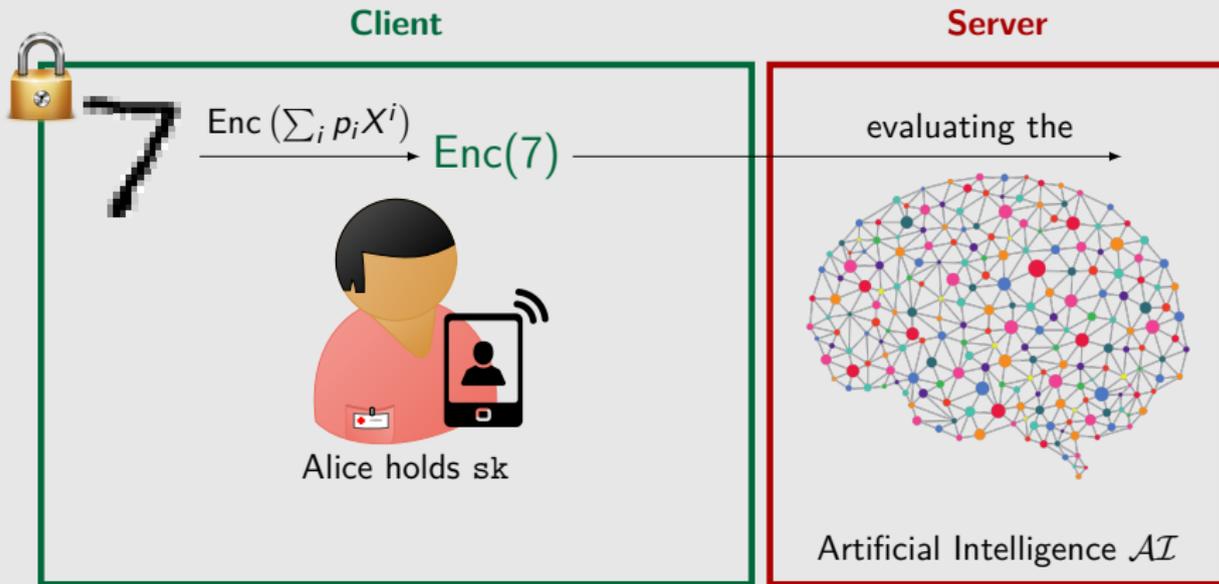
Alice holds  $sk$

Server

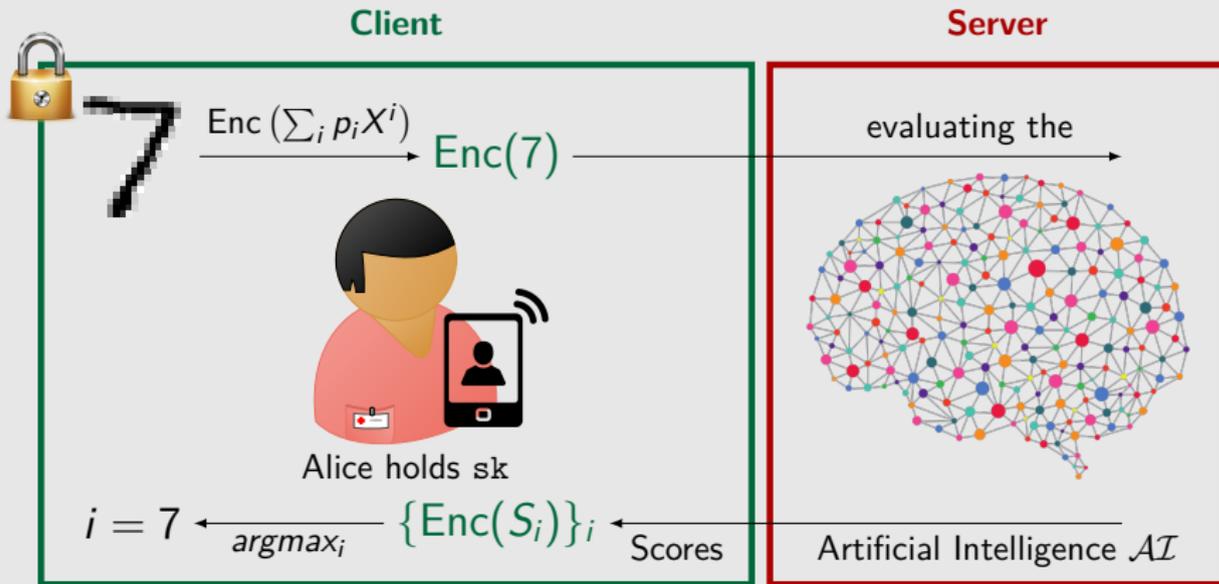


Artificial Intelligence  $\mathcal{AI}$

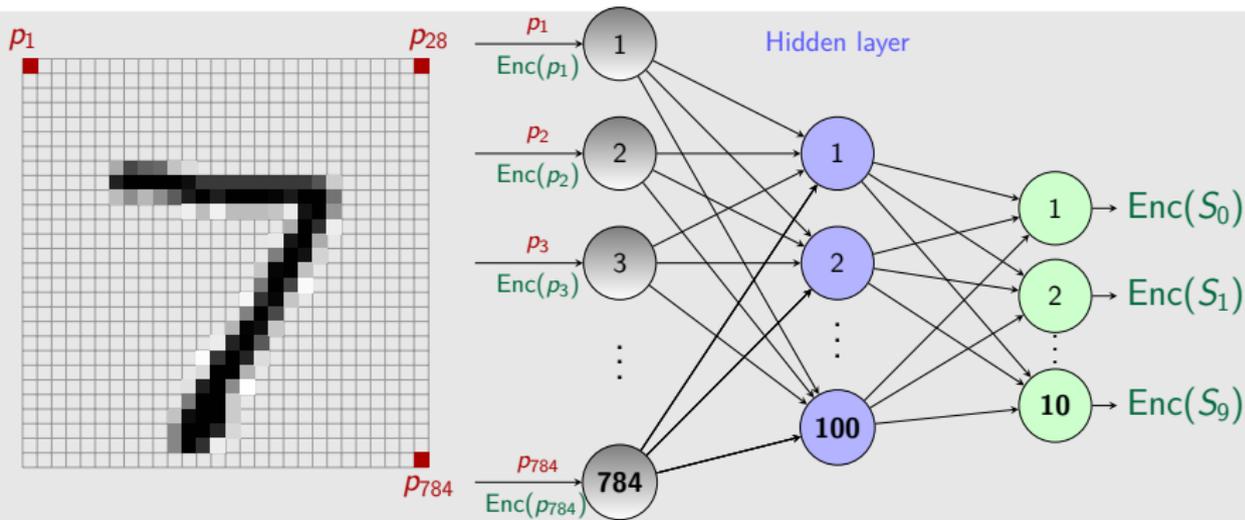
# FHE-DiNN: Practical Homomorphic Evaluation



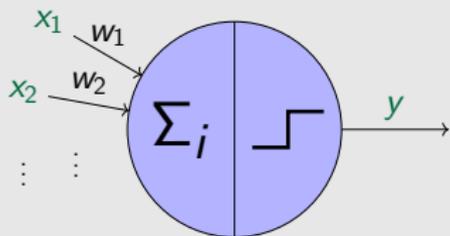
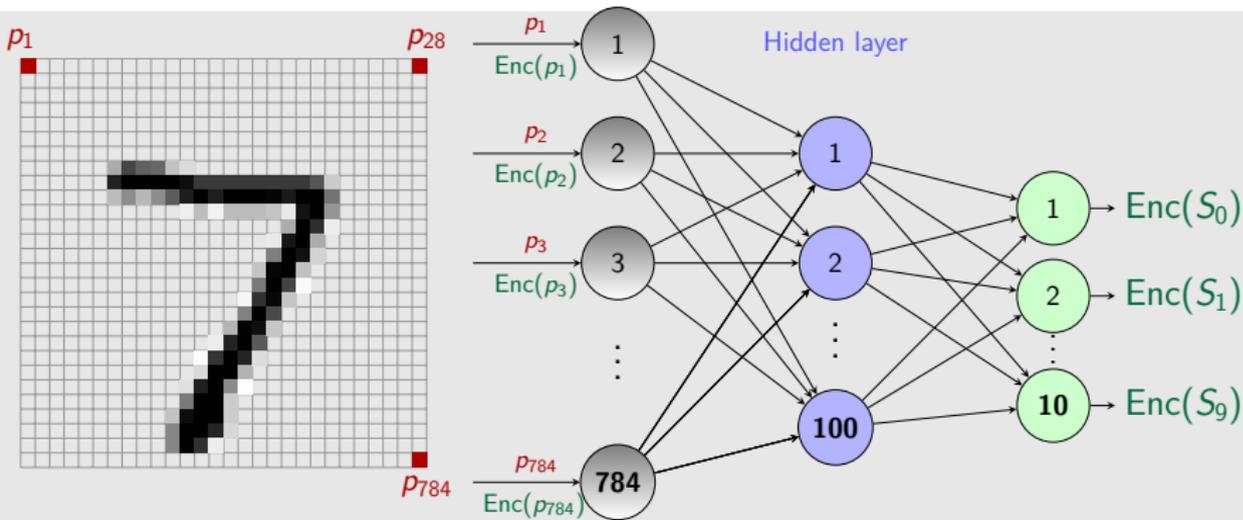
# FHE-DiNN: Practical Homomorphic Evaluation



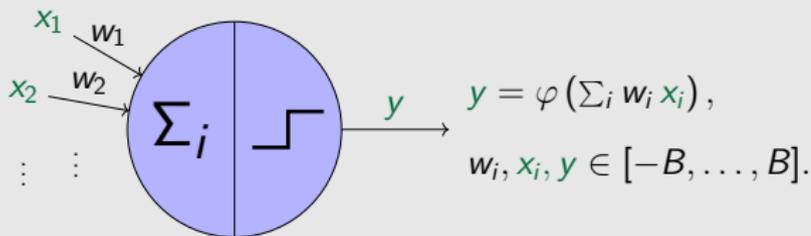
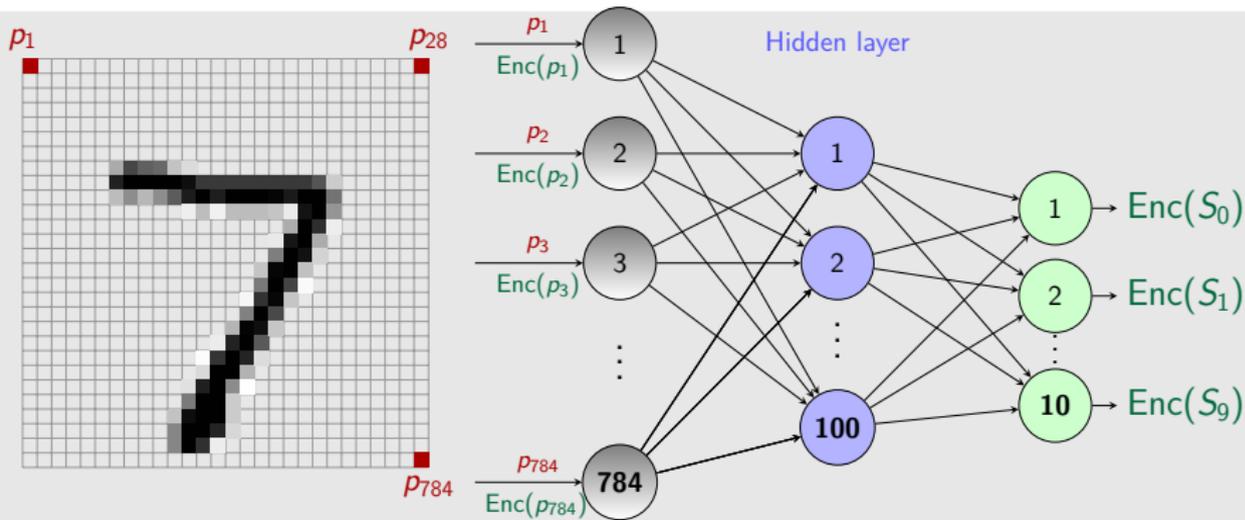
# FHE-DiNN: 96.35% accuracy in 1.64 [sec]



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