PhD position (M/F) in the
EU HORIZON 2020 MSCA-ITN TReSPAsS-ETN

(Reference: SN_MT_ PhD_privacy-preserving-biometrics_022020)

Title	Cryptographic primitives for GDPR compliance
Department	Digital Security
Publication date	02/2020
Start date	1st June 2020
Duration	Duration of the thesis
Description	In order to comply with the General Data Protection Regulation (GDPR), biometric operations should be performed without disclosing any sensitive information. Homomorphic encryption and secure multi-party computation can be considered as the main cryptographic tools for the design of novel primitives as they allow some functions to be evaluated by one or multiple parties without discovering any information than what is needed. The integration of these tools, while delivering privacy protection, may impact on systems' operation/performance. Some complex operations cannot be supported by existing practical tools and therefore may need to be approximated by simpler operations. It is critical, however, that these approximations do not degrade security. The PhD programme will research privacy preserving biometric identification and authentication primitives by leveraging such advanced cryptographic techniques, while minimizing computational, memory and bandwidth costs and accuracy degradation.
Eligibility	Please, visit the recruitment page at https://www.trespass-etn.eu/recruitment.html for MSCA-ITN eligibility rules.
Requirements	The successful candidate will have a Master's degree in engineering, mathematics, computing, physics or a related relevant discipline. You will have strong mathematical, programming and communication skills and be highly motivated to undertake challenging research. Good English language speaking and writing skills are essential. Knowledge of French is not required.
Application	Please, send to the email address below (i) a detailed Curriculum Vitae, (ii) a motivation letter of two pages also presenting the perspectives of research and education (iii) names and addresses of three references (preferably one from your final year project supervisor) no later than **31st March 2020.**
Contact	Dr Massimiliano Todisco – todisco@eurecom.fr
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