



Norwegian Biometrics Laboratory (NBL) is a distinguished research lab contributing actively to the biometrics research across Europe. NBL spans its expertise over physiological and behavioral biometrics including 2D & 3D face, iris, fingerprint, hand vein, gait, keystroke, gesture and mouse dynamics recognition.

Master Thesis

Multi-Party Computation for Biometric Information Protection

OBJECTIVES & GOALS:

Biometric data is considered sensitive personal data both by the GDPR and the ISO/IEC 24745 standard on biometric information protection. Therefore, it requires adequate protection. Multi-Party Computation (MPC) protocols are cryptographic protocols that allow several parties to jointly evaluate an arbitrary function without revealing the input data to one another. Thereby, they can be used to securely compute biometric distance computations and compare biometric templates securely.

TASKS:

- Select a suitable MPC protocol
- Prepare biometric templates for the use in MPC
- Benchmark computational efficiency

PREREQUISITES:

- High motivation and creativity
- Strong interest in research
- Programming experience

CONTACT:

- Pia Bauspieß (pia.bauspiess@ntnu.no)

NOTE: Highly qualified foreign students can get financial support to cover cost of an internship.