Background

Non-invasive fetal ECG (NI-fECG) is a promising new technology for improving birth outcomes (e.g. perinatal asphyxia)
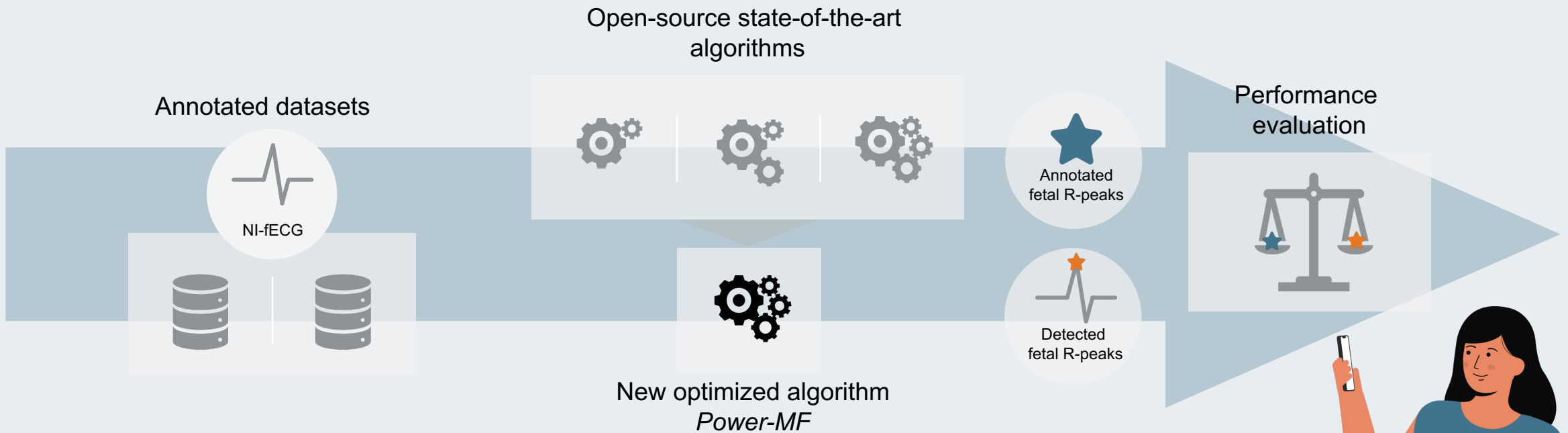
Research goal

Design new fetal ECG extraction algorithm, robust to noise

Benchmark against state-of-the-art algorithms

Methods

Annotated datasets

NI-fECG

Open-source state-of-the-art algorithms

New optimized algorithm
Power-MF

Annotated fetal R-peaks

Detected fetal R-peaks

Performance evaluation

Key findings

Power-MF outperforms state-of-the-art fetal ECG extraction algorithms and shows more robustness to noise