

# Intelligent Learning and Analysis Systems SS19, Exercise Sheet 1

Andreas Hene, Niklas Mertens, Richard Palme

April 12, 2019

- 1. Finding Two Missing Items**
- 2. Identifying the Majority**
- 3. Reservoir Sampling I.**
- 4. Reservoir Sampling II.**
- 5. The  $\phi$ -HH Problem: Lower Bounds**