

## Algorithms for Big Data

Fall Semester 2019

### Exercise Set 11

**Exercise 1:**

Write explicitly the LP for compressed sensing  $L_1$  norm minimization.

**Exercise 2:**

(2 pts.)

What is the complexity of the decision version of the  $L_0$  norm minimization for the compressed sensing: given  $A$ ,  $b$  and  $k$ , is there  $k$ -sparse  $x$  such that  $Ax = b$ .