# Exercise 5

**19.10.2021**

## #1 Elicitation of attribute-specific value functions

The DM is considering three jobs with salaries (A) 900€/month, (B) 1200€/month, and (C) 1700€/month. To obtain a value function for salary attribute, she applies the method of equally preferred distances. The measurement scale is set to [600€, 2000€]. Based on the DM's preferences, $(900 \leftarrow 600) \sim_d (1250 \leftarrow 900) \sim_d (1650 \leftarrow 1250) \sim_d (2100 \leftarrow 1650)$.

Determine the attribute-specific values of the three alternatives.

## #2 Difference independence

An engineer is selecting 1 km long pieces of road to be paved. His value model includes attributes "time since last pavement" (in years, defined for 0-25 years, value function increasing) and "average hourly number of cars that use the road" (in # of cars, value function increasing). The engineer thinks that one should pave a road (10 years, 100 cars) rather than (13 years, 10 cars).

Are the attributes difference independent?