

EECS 839

Homework Assignment # 1

due: February 18, 2020

80 pts. 1. For the following decision table

	Attributes			Decision
	Age	Gender	Education	Hobby
1	32	male	higher	fishing
2	25	female	primary	fishing
3	27	male	higher	fishing
4	25	male	primary	fishing
5	48	male	primary	shooting
6	27	female	primary	shooting
7	65	male	primary	shooting

induce the sets of rules using the MLEM2 algorithm. Use the standard MLEM2 approach to numerical attributes using all cutpoints.

20 pts. 2. In general, for subsets X and Y of the universe U

$$\underline{A}(X - Y) \subseteq \underline{A}X - \underline{A}Y,$$

where A is the set of all attributes.

Show a decision table, and subsets X and Y of U with

$$\underline{A}(X - Y) \neq \underline{A}X - \underline{A}Y.$$