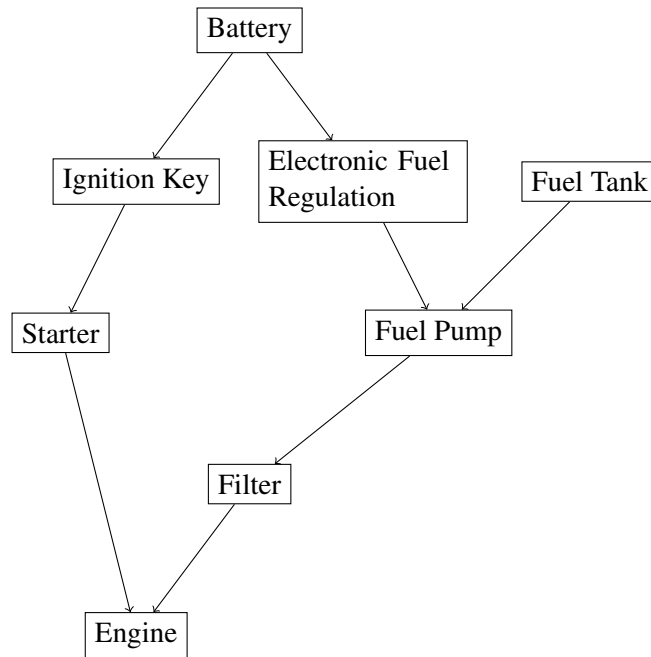


Grundlagen der Wissensverarbeitung-Übungsblatt 9

Übungsgruppe 2; Tom Kastek (4kastek@inf), Phil Sehlmeier (4sehlmeier@inf), Max Wutz (wutzmax@gmail.com) · WiSe 17/18

1 Exercise 9.3: (Diagnosis (cont.))

Belief Network



$$P(Battery) = 0.9$$

$$P(\neg Battery) = 0.1$$

$$P(IgnitionKey|Battery) = 0.9$$

$$P(\neg IgnitionKey|Battery) = 0.1$$

$$P(ElectronicFuelRegulation|Battery) = 0.9$$

$$P(\neg ElectronicFuelRegulation|Battery) = 0.1$$

$$P(FuelTank) = 0.9$$

$$P(\neg FuelTank) = 0.1$$

Grundlagen der Wissensverarbeitung-Übungsblatt 9

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$$P(\textit{Starter}|\textit{IgnitionKey}) = 0.9$$

$$P(\neg\textit{Starter}|\textit{IgnitionKey}) = 0.1$$

$$P(\textit{FuelPump}|\textit{ElectronicFuelRegulation} \wedge \textit{FuelTank}) = 0.9$$

$$P(\neg\textit{FuelPump}|\textit{ElectronicFuelRegulation} \wedge \textit{FuelTank}) = 0.1$$

$$P(\textit{Filter}|\textit{FuelPump}) = 0.9$$

$$P(\neg\textit{Filter}|\textit{FuelPump}) = 0.1$$

$$P(\textit{Engine}|\textit{Starter} \wedge \textit{Filter}) = 0.9$$

$$P(\neg\textit{Engine}|\textit{Starter} \wedge \textit{Filter}) = 0.1$$