

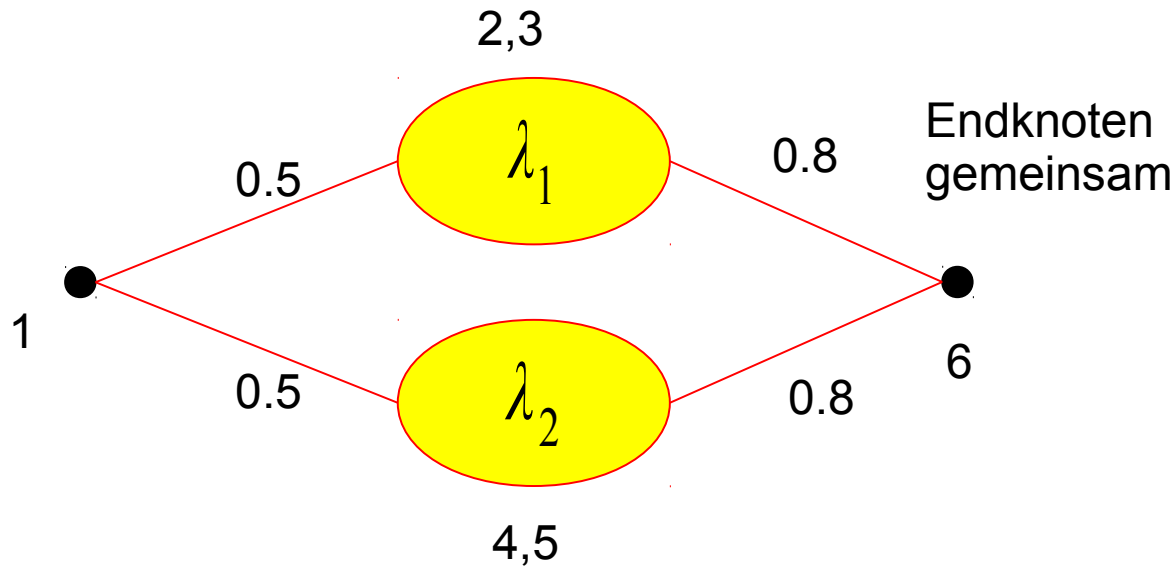
Übung 9 – Kombination von HMM

Kombination von HMM

$$\lambda_1 \quad A_1 = \begin{pmatrix} 0.4 & 0.6 & 0 \\ 0 & 0.2 & 0.8 \\ 0 & 0 & 1 \end{pmatrix} \quad B_1 = \begin{pmatrix} 0.1 & 0.2 & 0.7 \\ 0.2 & 0 & 0.8 \\ 0 & 0 & 0 \end{pmatrix}$$

$$\lambda_2 \quad A_2 = \begin{pmatrix} 0.6 & 0.4 & 0 \\ 0 & 0.2 & 0.8 \\ 0 & 0 & 1 \end{pmatrix} \quad B_2 = \begin{pmatrix} 0 & 0.7 & 0.3 \\ 0.7 & 0.2 & 0.1 \\ 0 & 0 & 0 \end{pmatrix}$$

parallel

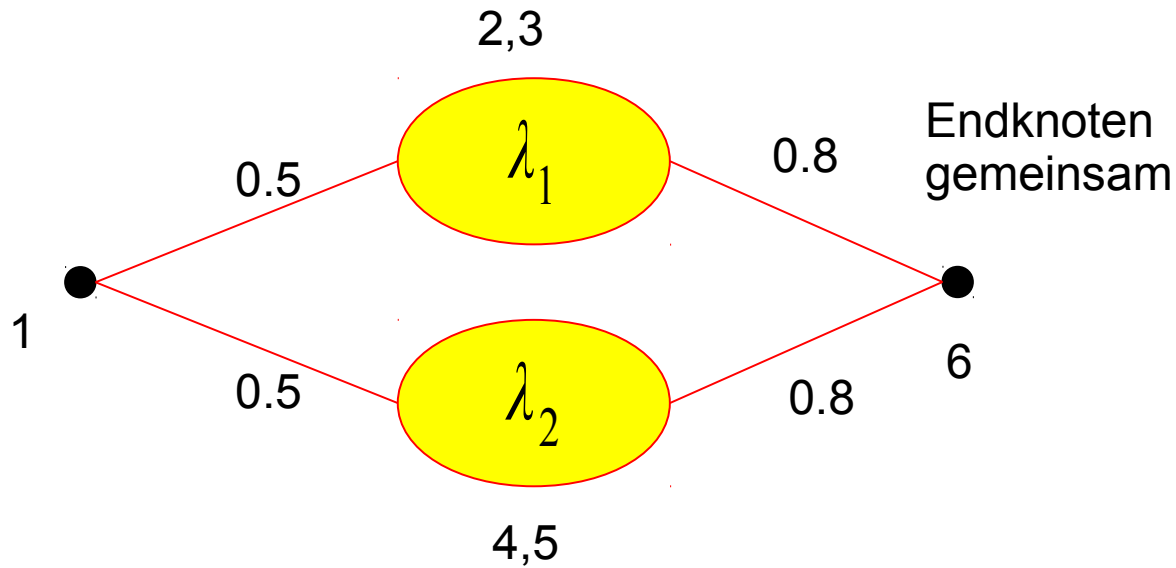


$$A_1 = \begin{pmatrix} 0.4 & 0.6 & 0 \\ 0 & 0.2 & 0.8 \\ 0 & 0 & 1 \end{pmatrix}$$

$$A_2 = \begin{pmatrix} 0.6 & 0.4 & 0 \\ 0 & 0.2 & 0.8 \\ 0 & 0 & 1 \end{pmatrix}$$

$$A_P = \begin{pmatrix} 0 & 0.5 & 0 & 0.5 & 0 & 0 \\ 0 & 0.4 & 0.6 & 0 & 0 & 0 \\ 0 & 0 & 0.2 & 0 & 0 & 0.8 \\ 0 & 0 & 0 & 0.6 & 0.4 & 0 \\ 0 & 0 & 0 & 0 & 0.2 & 0.8 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}$$

parallel

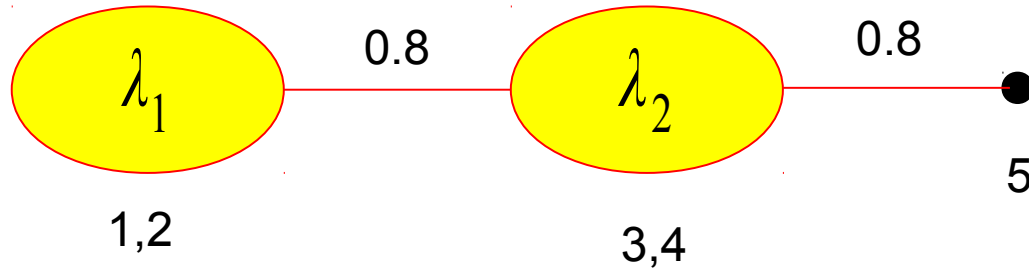


$$B_1 = \begin{pmatrix} 0.1 & 0.2 & 0.7 \\ 0.2 & 0 & 0.8 \\ 0 & 0 & 0 \end{pmatrix}$$

$$B_2 = \begin{pmatrix} 0 & 0.7 & 0.3 \\ 0.7 & 0.2 & 0.1 \\ 0 & 0 & 0 \end{pmatrix}$$

$$B_P = \begin{pmatrix} 0 & 0 & 0 \\ 0.1 & 0.2 & 0.7 \\ 0.2 & 0 & 0.8 \\ 0 & 0.7 & 0.3 \\ 0.7 & 0.2 & 0.1 \\ 0 & 0 & 0 \end{pmatrix}$$

reihe



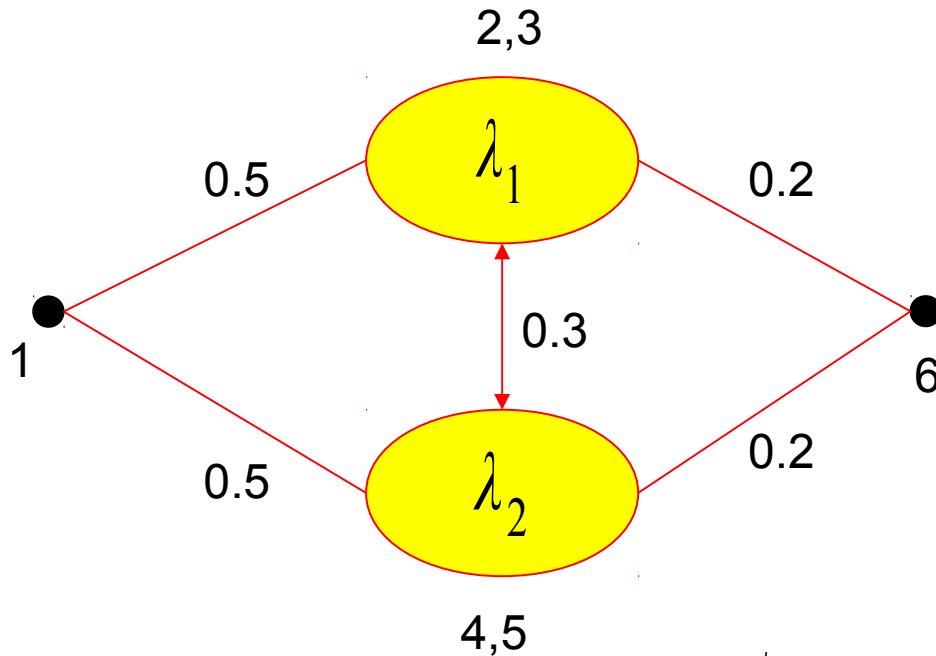
$$A_1 = \begin{pmatrix} 0.4 & 0.6 & 0 \\ 0 & 0.2 & 0.8 \\ 0 & 0 & 1 \end{pmatrix}$$

$$A_2 = \begin{pmatrix} 0.6 & 0.4 & 0 \\ 0 & 0.2 & 0.8 \\ 0 & 0 & 1 \end{pmatrix}$$

$$A_R = \begin{pmatrix} 0.4 & 0.6 & 0 & 0 & 0 \\ 0 & 0.2 & 0.8 & 0 & 0 \\ 0 & 0 & 0.6 & 0.4 & 0 \\ 0 & 0 & 0 & 0.2 & 0.8 \\ 0 & 0 & 0 & 0 & 1 \end{pmatrix}$$

$$B_R = \begin{pmatrix} 0.1 & 0.2 & 0.7 \\ 0.2 & 0 & 0.8 \\ 0 & 0.7 & 0.3 \\ 0.7 & 0.2 & 0.1 \\ 0 & 0 & 0 \end{pmatrix}$$

beliebige Folgen



$$A_1 = \begin{pmatrix} 0.4 & 0.6 & 0 \\ 0 & 0.2 & 0.8 \\ 0 & 0 & 1 \end{pmatrix}$$

$$A_2 = \begin{pmatrix} 0.6 & 0.4 & 0 \\ 0 & 0.2 & 0.8 \\ 0 & 0 & 1 \end{pmatrix}$$

Mit Wahrscheinlichkeit 0.6 soll zum anderen HMM gewechselt werden.

$$A_F = \begin{pmatrix} 0 & 0.5 & 0 & 0.5 & 0 & 0 \\ 0 & 0.4 & 0.6 & 0 & 0 & 0 \\ 0 & 0.3 & 0.2 & 0.3 & 0 & 0.2 \\ 0 & 0 & 0 & 0.6 & 0.4 & 0 \\ 0 & 0.3 & 0 & 0.3 & 0.2 & 0.2 \\ 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}$$

$$B_F = \begin{pmatrix} 0 & 0 & 0 \\ 0.1 & 0.2 & 0.7 \\ 0.2 & 0 & 0.8 \\ 0 & 0.7 & 0.3 \\ 0.7 & 0.2 & 0.1 \\ 0 & 0 & 0 \end{pmatrix}$$