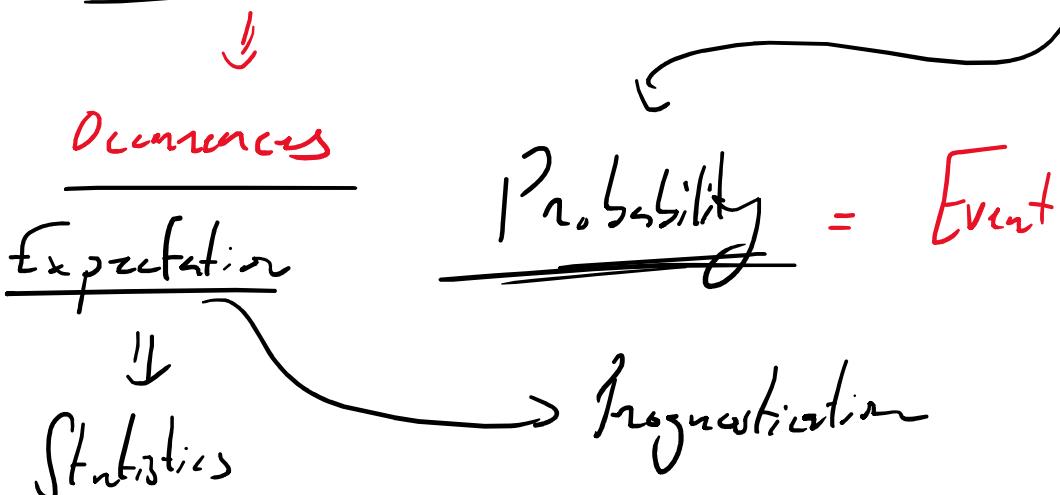


⇒ Recommendation: list of Predictions



⇒ Recommendation

Collaborative

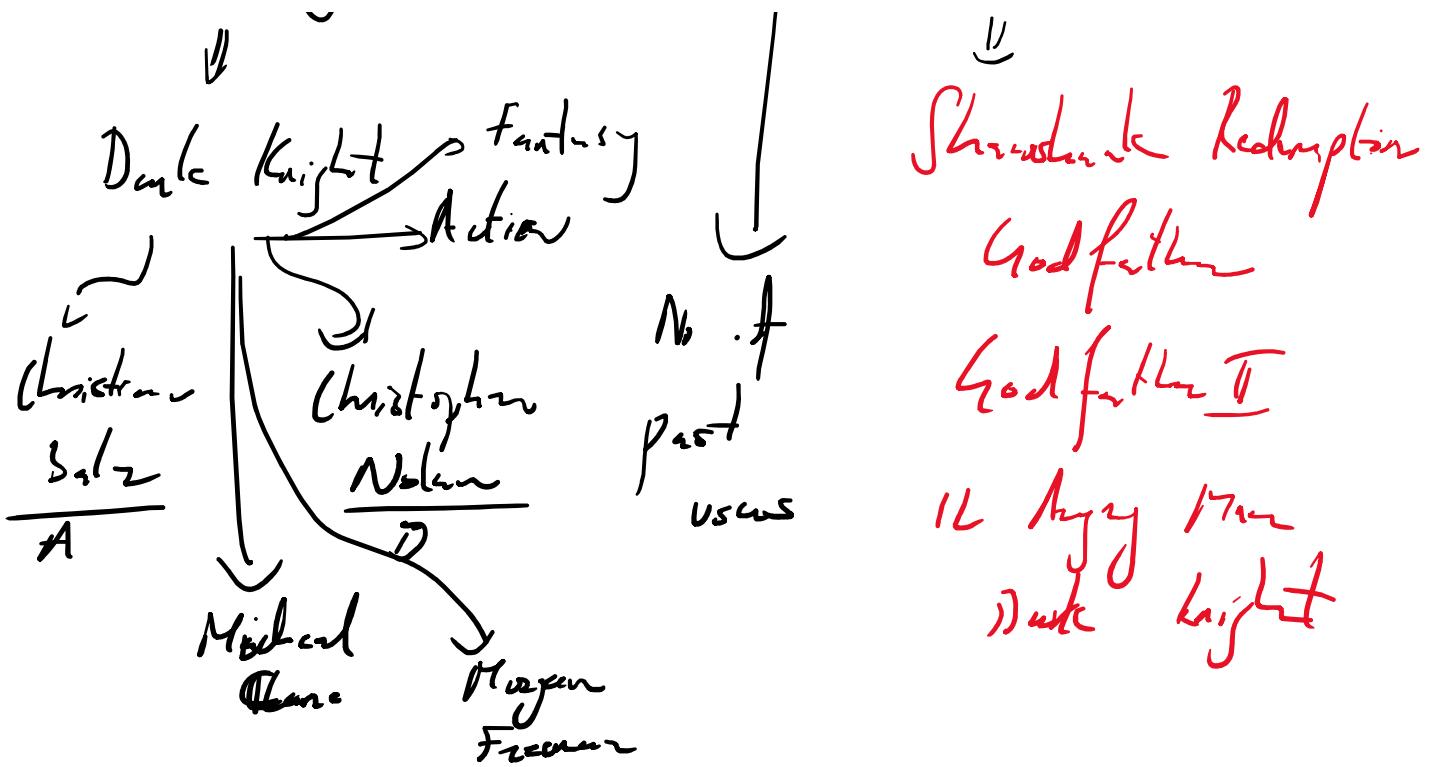
Filtration



Content-based

Filtration





⇒ User-based Nearest Neighbor Recommendation.

	II	I2	IJ	SI
Alice	5	3	4	4
Bob	3	1	2	3
Chris	4	3	4	3

⇒ Pearson's Corr-Coeff:

$$\text{sim}(a, b) = \frac{\sum_{p \in P} (r_{a,p} - \bar{r}_a)(r_{b,p} - \bar{r}_b)}{\sqrt{\sum_{p \in P} (r_{a,p} - \bar{r}_a)^2} \sqrt{\sum_{p \in P} (r_{b,p} - \bar{r}_b)^2}}$$

$$\sqrt{\sum_{p \in P} (r_{a,p} - \bar{r}_a)^2} \sqrt{\sum_{p \in P} (r_{l,p} - \bar{r}_l)^2}$$

r - Selected Single product ; P - List of all products

\bar{r} - Recommendation \bar{r} - Average Recommendations