

## Übungen zur Vorlesung

### *Algorithms for context prediction in ubiquitous systems*

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## 2 Exact prediction approaches

### 2.1 High-level and low-level context prediction

In the lecture we have discussed the IPAM algorithm. Consider the following scenario:  
Possible Events: A,B,C;  $\alpha = 0.8$ ; Observed Sequence: A-A-B-A-C...

- a) Calculate the prediction of the IPAM algorithm on observing the input sequence.

### 2.2 Computational complexity of the Boyer-Moore algorithm

- a) Derive the computational complexity of the Boyer-Moore algorithm

### 2.3 Computational complexity of the ONISI algorithm

- a) Derive the computational complexity of the ONISI algorithm