

Knowledge Graph Based on Bayesian Network

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2018-9-8

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1 Why Bayesian Network

To empower both data and human knowledge.

2 Definitions

2.1 Node

```
using Attributes = Dict<AttributeName, Value>;  
class Node {  
    NodeName    node_name;  
    Node        parent;  
    Nodes       children;  
    Attributes  attributes;  
};
```

3 Goals

3.1 students' perspective

philosophy: Accelate learning speed. definition: At Time t1, Student s understands Concept c with a Probality p1, after a fixed period training at platform, at Time t2, Student s understands Concept c with a Probality p2,
details:

3.2 company's perspective

4 Graph Architecture

4.1 basic definition

4.2 how to add a node

4.3 how to delete a node

4.4 how to add a parent node

4.5 how to add a child node

5 Evaluation, Metrics

6 Inference

7 Parameters: Learning, Hand Coding

8 Scalability

9 Conclusion