

Université de Tunis
Institut Supérieur de Gestion
Ecole Doctorale Sciences de Gestion

Title
Title

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Abstract

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Keywords: Keyword, Keyword, Keyword, Keyword.

List of Abbreviations and Symbols Used

BN	Bayesian Network
DAG	Directed Acyclic Graph
DM	Decision Maker
<i>ECO</i>	Expected Cost of Observation

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Introduction

Problem presentation

Approaches

Approaches [1].

Motivations for a Multicriteria Bayesian Troubleshooting Approach

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Chapter 1

Multicriteria Decision Aid

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1.1 Introduction

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1.2 Multicriteria Decision Aid presentation

1.2.1 Definition

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of MCDA

1.2.2 Criteria

To each criterion g_j is attached a weight w_j representing its importance.

1.3 Conclusion

Chapter 2

Bayesian Networks

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2.1 Introduction

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2.2 Graphs and probabilities

2.2.1 Graphs

$$p(X_1, X_2, \dots, X_n) = f(X_1, X_2, \dots, X_n) \quad (2.1)$$

2.2.2 Basic concepts of probabilities

Bayesian formalism is based on ...

2.3 BNs: an Overview

2.3.1 Definition of a BN

Different representations of a DAG are presented in Figure 2.1.

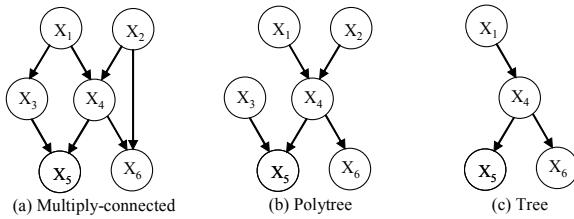


Figure 2.1: Different types of Directed Acyclic Graphs

2.3.2 Marginal probabilities

The variable BatteryAge(BA) has two states New(N) and Old(O). Its marginal probabilities are presented in Table 2.1.

BatteryAge(BA)	
New(N)	0.7
Old(O)	0.3

Table 2.1: Marginal probabilities of the variable BatteryAge (BA)

2.4 Conclusion

Conclusion and perspectives

Main contributions

Perspectives

Bibliography

- [1] D. Heckerman, J. S. Breese, and K. Rommelse. Troubleshooting under uncertainty. *Communications of the ACM, Technical Report MSR-TR-94-07, Microsoft Research*, 1994.

Appendix A

Appendix A

A.1 Presentation

