Bayesian Networks

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About the working group Computational Intelligence

Teaching:

Intelligent Systems	Bachelor (2 V + 2 Ü, 5 CP)
Neuronal Networks	Bachelor (2 V + 2 Ü, 5 CP)
Fuzzy Systems	Master (2 V + 2 Ü, 6 CP)
Bayesian Network	Master (2 V + 2 Ü, 6 CP)
Intelligent Data Analysis	Master (2 V + 2 Ü, 6 CP)

(pro-)seminars: Classification Algorithms, Clustering Algorithms

Research examples:

Validation of Density-based Clustering (C. Braune)
EEG Analysis with Deep Neural Networks (C. Doell)
Analysis of Social Networks (P. Held)

About the lecture

Lecture dates: Wednesday, 11:15 –12:45, G29-307

Information about the course:
`http://fuzzy.cs.ovgu.de/wiki/pmwiki.php?n=Lehre.BN1617`

- Weekly lecture slides as PDF
- Also assignment sheets for the exercise
- Online registration for exercises
- Important announcements and date!

Content of the lecture

Introduction

Rule-based Systems

Elements of Graph Theory

Decomposition

Probability Foundations

Applied Probability Theory

Probabilistic Causal Networks

Propagation in Belief Networks

Learning Graphical Models

Decision Graphs / Influence Diagrams

Frameworks of Imprecision and Uncertainty

About the exercise

Active participation and explanations of your solutions

Assistant will call attention to mistakes and answer questions

Pure ‘calculations’ of sample solution is not the purpose

Assistant:

- Pascal Held `pheld@ovgu.de`
- William Beluch `william.beluch@ovgu.de`

First assignment due October 22, 2015

- Monday, 9:15 – 10:45 (G29-K059), Beluch (english)
- Friday, 9:15 – 10:45 (G29-E037), Held (german)

Conditions for Certificate ("Schein") and Exam

Exam or Certificate will get who...

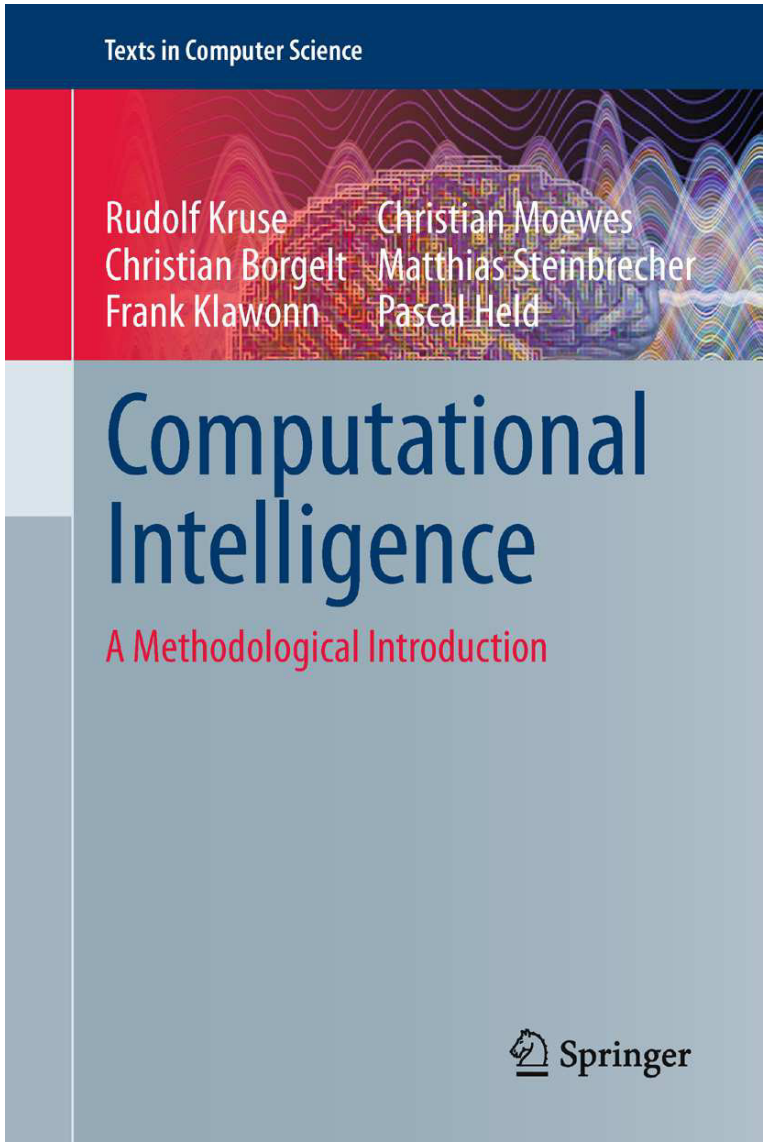
Contribute well in exercises every week,

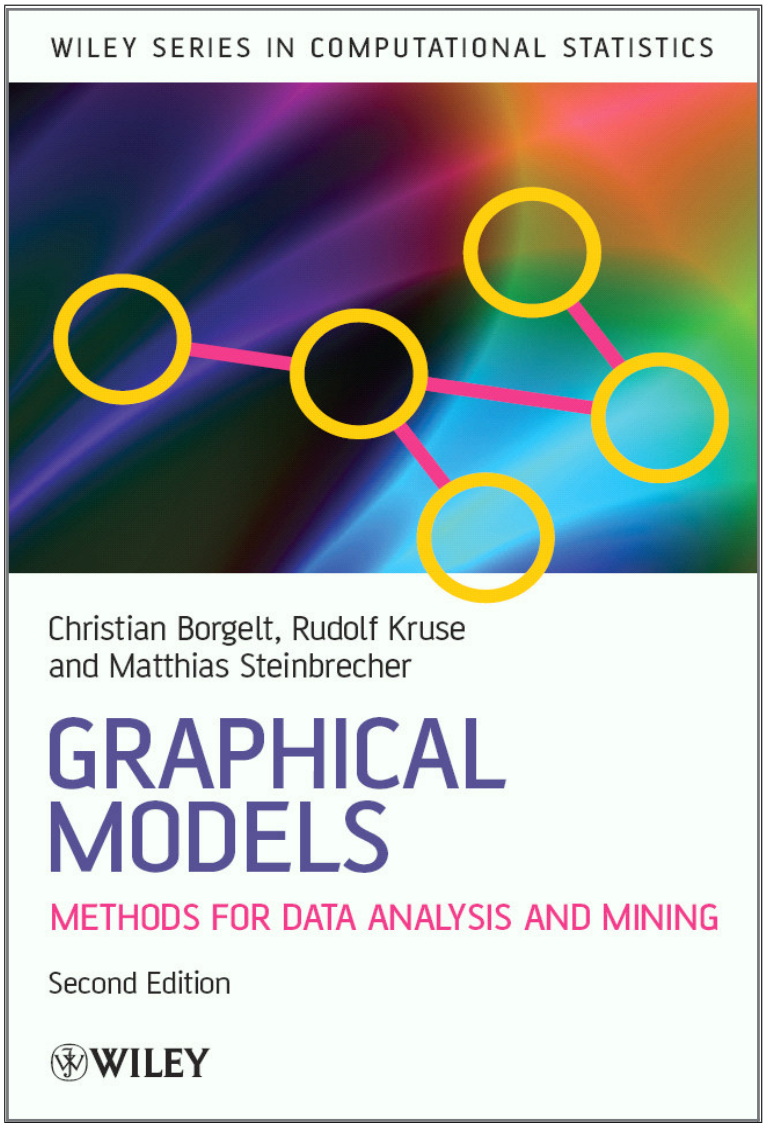
Present ≥ 2 solutions to written assignment during exercises.

Tick off $\geq 66\%$ of all written assignments,

Pass written exam (120 min)

Books about the course





http://www.computational-intelligence.eu/