Bayesian Networks

Prof. Dr. Rudolf Kruse,
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About me: Rudolf Kruse

In 1979 diploma in mathematics (minor computer science) at TU Braunschweig

There dissertation in 1980, habilitation in 1984

2 years full-time employee at Fraunhofer Institute

In 1986 offer of professorship for computer science at TU Braunschweig

Since 1996 professor at the University of Magdeburg

Research: data mining, explorative data analysis, fuzzy systems, neuronal networks, evolutionary algorithms, Bayesian networks

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Office: G29-008, telephone: 0391 67-58706

Consultation: Thursday, 10 a.m. – 11 noon

About the lecture

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

Information about the course:
`http://www.is.ovgu.de/Teaching/WS+2017_2018/Bayes+Networks.html`

- 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:

- Alexander Dockhorn, `alexander.dockhorn@ovgu.de`

First assignment due October 17./18.

- Tuesday: 9:15 – 10:45 am (G29-K059), Dockhorn (english)
- Wednesday: 1:15 – 2:45 pm (G29-E037), Dockhorn (german)

Conditions for Certificate ("Schein") and Exam

Exam or Certificate will get who...

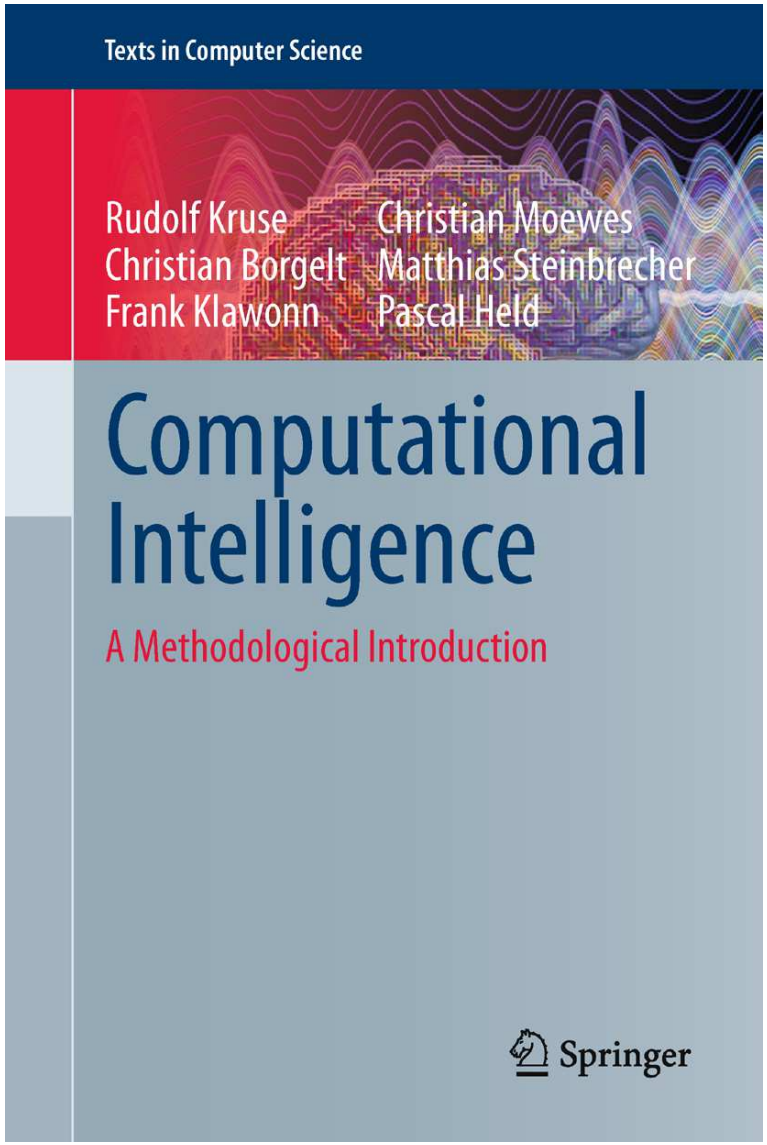
Contribute well in exercises every week,

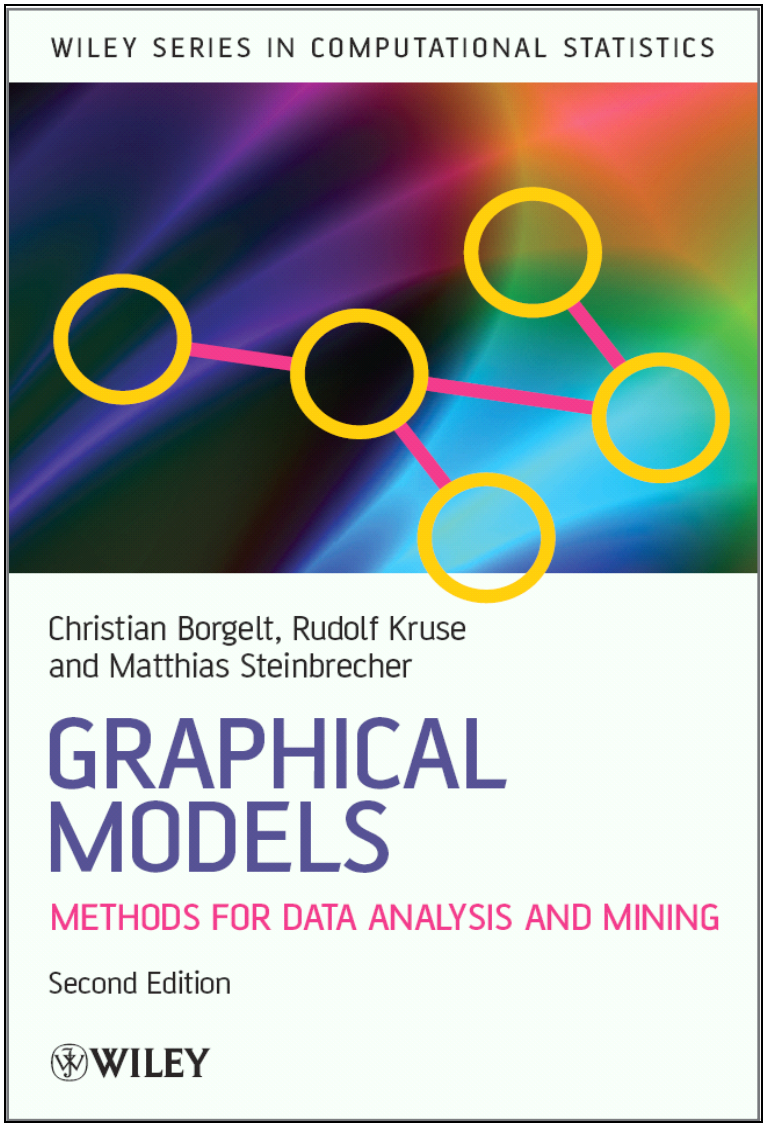
Present ≥ 2 solutions to written assignment during exercises.

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

Pass written exam (120 min)

Books about the course





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