INF FAKULTÄT FÜR INFORMATIK

Fuzzy Systems

Introduction

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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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Consultation: Thursday, 10 a.m. – 11 a.m. in room G29-014

Content of the lecture

Introduction, fuzzy sets and fuzzy logic

Theory

Fuzzy control

Fuzzy data analysis

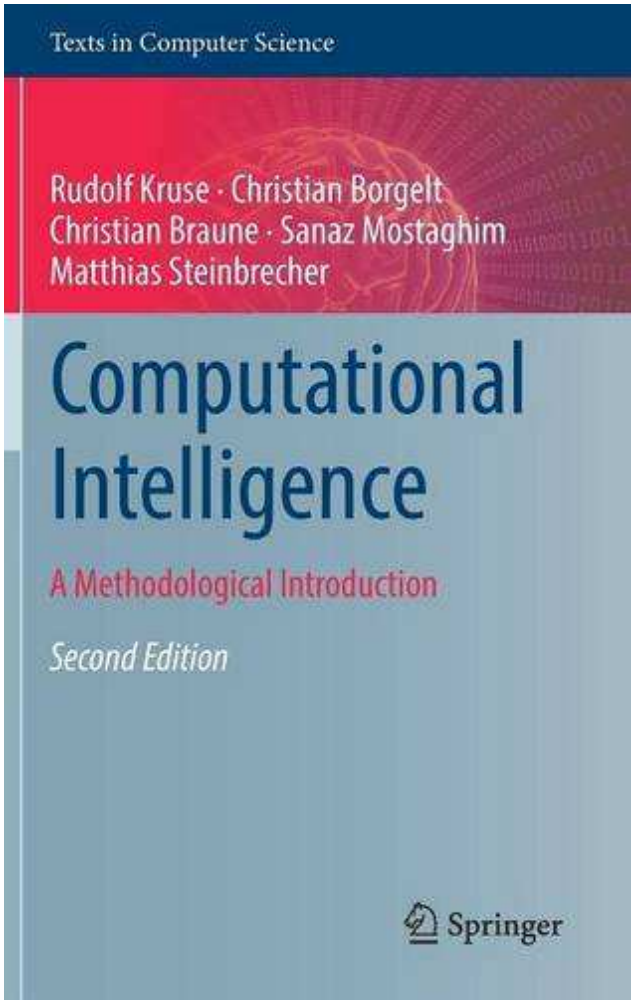
Learning fuzzy systems

Conditions for Exam and Certificate

Exam or Certificate will get who...

- regularly contributes well in the exercises,
- ticks off at least $\geq 50\%$ of all written assignments,
- presents ≥ 2 solutions to written assignments during exercises (this number is reduced in case not everybody can present twice due to the number of students per exercise)
- submits at least twice a running implementation of a programming assignment, and
- students who fulfill these criteria can to write the exam (120 min), which they need to pass to successfully finish the course

Books about the course



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

What are we going to talk about?!

Research on fuzzy systems wants to establish

- theoretical and methodological bases for computational intelligence,
- tools and techniques for design of intelligent systems.

Fuzzy systems focus on applications

- where some aspects of imprecision plays an important role.

Fuzzy set theory and fuzzy logic

- with a solid mathematical foundation.