

Fuzzy Logic-Based Modeling in Collaborative and Blended Learning

Part of the Advances in Educational Technologies and Instructional Design (AETID) Book Series

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Description:

Technology has dramatically changed the way in which knowledge is shared within and outside of traditional classroom settings. The application of fuzzy logic to new forms of technology-centered education has presented new opportunities for analyzing and modeling learner behavior.

Fuzzy Logic-Based Modeling in Collaborative and Blended Learning explores the application of the fuzzy set theory to educational settings in order to analyze the learning process, gauge student feedback, and enable quality learning outcomes.

This premier reference monograph presents key research on educational data analysis and modeling through the integration of research on advanced modeling techniques, educational technologies, fuzzy concept maps, hybrid modeling, neuro-fuzzy learning management systems, and quality of interaction.

Readers:

This publication is an essential reference source for educators, researchers, educational administrators and designers, and IT specialists.

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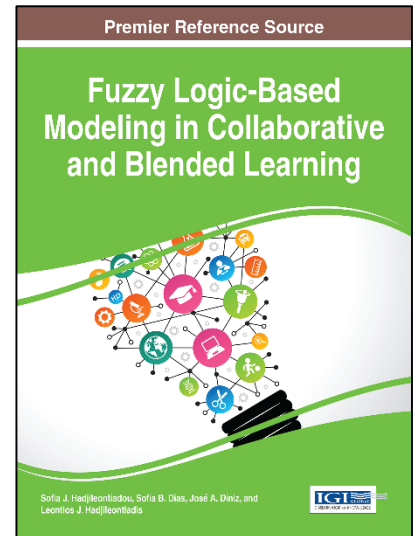
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Topics Covered:

- Advanced Modeling Techniques
- Data Modeling
- Educational Data Analysis
- Educational Technologies
- Fuzzy Concept Maps
- Hybrid Modeling
- Learning Management Systems
- Quality of Interaction



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 CHAPTER 3: Computer-Supported Collaborative Learning: A Holistic Perspective
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 CHAPTER 5: Personal/Cloud Learning Environment, Semantic Web 3.0 & Ontologies

PART II: FUZZY LOGIC: DEFINITIONS AND INFERENCE SYSTEMS

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PART IV: OVERALL PERSPECTIVE

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Sofia J. Hadjileontiadou (♀) received the Diploma degree in Civil Engineering in 1986 and the Ph.D. degree in Educational Technology in 2000, both from the Aristotle University of Thessaloniki (AUTH), Thessaloniki, Greece. She also holds a Msc in Environmental Engineering. Currently, she is principal of SEK an educational structure within VET, tutor at the Master's in Education (M.Ed) program of the Hellenic Open University and research associate at the 1-Year Programme of Pedagogical Training (EPPAIK) at the School of Pedagogical and Technological Education of Greece. She received the best full paper award at the ICALT'2004 conference of IEEE. Her research interests include educational technology, ICT mediated collaboration, blended learning, innovation in didactics, environmental education and fuzzy logic applications upon educational data. She has published 20 papers in peer reviewed international journals, 40 papers in peer reviewed international conference proceedings and 7 book chapters. She is a member of the Technical Chamber of Greece, the Greek Society of the Teachers of Environmental Education and the Greek Scientific Society of ICT in Education.

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Leontios J. Hadjileontiadis (♂, π-1966) received the Diploma and the Ph.D. degree in Electrical and Computer Engineering in 1989 and 1997, respectively, both from the Aristotle University of Thessaloniki (AUTH), Thessaloniki, Greece. Professor Hadjileontiadis also holds a Diploma in Musicology (AUTH, Thessaloniki, 2011) and a Ph.D. degree in music composition (University of York, UK, 2004). Since December 1999 he joined the Department of Electrical and Computer Engineering, AUTH, Greece as a faculty member, where he is a Full Professor, working at the Signal Processing and Biomedical Technology Unit of the Telecommunications Laboratory. Professor Hadjileontiadis is an IEEE Senior Member.