Complex exam major subject

Foundations of computer science

Syllabus

Classical and non-classical logic; proof theory; artificial intelligence; semantic web; data and text mining; knowledge representation; unconventional computation; computability and complexity theory; formal languages; computer algebra; theory of automata; automata networks, didactics of computer science.

Bibliography

1. C. S. Calude: Computing with Cells and Atoms. Taylor & Francis Publishers London, 2001.
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3. Futó Iván (szerk.): Mesterséges intelligencia, Aula Kiadó, 1999.
4. J. Hromkovic, R. Kralovic, J. Vahrenhold (szerk.): Teaching Fundamental Concepts of Informatics. Springer-Verlag Berlin Heidelberg, 2010.
5. J.E. Hopcroft, R. Motwani, J.D. Ullmann: Introduction to Automata Theory, Languages, and Computation, Addison-Wesley, 2nd edition, Boston, MA, 2000.
6. Pásztorné Varga Katalin, Várterész Magda: A matematikai logika alkalmazásszemléletű tárgyalása, Panem Kiadó, Budapest, 2003.

Compulsory subjects for this major subject

Recommended subjects for this major subject