

Fakultet dla I. r. II st.

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Phonetics in Speech Technology

Short description:

Phonetic knowledge can be defined as knowledge derived from studying speech production and perception and the analysis of speech signals. This course is primarily aimed at students who are interested in phonetics and speech technology. The course will compare spoken language processing as performed by humans and by machines. Theories of human speech production and perception will be discussed alongside algorithms for speech synthesis and automatic speech recognition. Attention will be given to the latest research attempts to unify these areas within a common framework.

The course contains segments concerning:

- Linguistic theory and phonetics
- Speech production by humans (articulation and acoustics)
- Speech production by machines (speech synthesis)
- Speech perception by humans (perception)
- Speech perception by machines (speech recognition)
- Experimental work
- Methods for evaluation
- Data collection

Didactic methods:

- conversational lecture for theoretical issues
- work in groups and individual work in collecting data
- discussion about methods and results

Assessment methods and criteria:

- final written exam or final independent research (60%),
- continuous assessment (ongoing preparation for the classes and tasks during the classes) (40%)