

Laboratory Course

“Automatic Speech Recognition”

WS 2017/2018

Type P4	Schedule / Room Fr 10 ⁰⁰ -11 ³⁰ Seminarraum i6	Start 13.10.17	Instructor Prof. Dr.-Ing. H. Ney Dr. rer.nat. R. Schlüter Eugen Beck
<p>Content:</p> <p>The course will cover the implementation of a dynamic decoding algorithm for automatic speech recognition in C++. Given the trained probabilistic models, the goal of such a search algorithm is to find the most probable word sequence. Based on the state-of-the-art speech recognition software of the chair, we will implement a fast variant of a dynamic search method. To reduce the search effort, we will apply several pruning techniques. Finally, we will evaluate the software on a recognition task.</p> <p>Assignment:</p> <p>Applied Computer Science/ Field of Specialization</p> <p>Requirements:</p> <ul style="list-style-type: none"> • Bachelor • Participation in at least one of the lectures “Introduction to Statistical Classification”, “Introduction to Automatic Speech Recognition”, or “Introduction to Statistical Methods in Natural Language Processing” is compulsory. • If a “Leistungsnachweis” was done in one of the above lectures, the participation in the seminar is guaranteed. • Practical experience with the programming language C/C++ are helpful. <p>References:</p> <p>Lecture notes und References from lecture “Introduction to Automatic Speech Recognition” and “Advanced Methods in Automatic Speech Recognition”</p> <p>Recurrence:</p> <p>Each winter term.</p> <p>Others:</p> <p>The first meeting will take place at the beginning of the term in the seminar room of the Lehrstuhl Informatik 6.</p> <p>In agreement with the participants the lab course will take place during the term or as a block at the end of the term. Among others its goal is to introduce candidates of Hiwi-jobs and diploma works to the methods used at the Lehrstuhl Informatik 6.</p> <p>Enquiries to:</p> <p>Eugen Beck, Lehrstuhl Informatik 6, Tel. 80-21634, E-Mail: beck@cs.rwth-aachen.de</p>			