

## Recommendation for the defense of Ph.D. thesis

**Ph.D. candidate:** Martin Karafiát  
**advisor:** Jan Černocký

I am happy that Martin Karafiát has finished his thesis under my supervision, although there was sort of “collective supervision” - I must give great credit to Lukas Burget who worked with Martin locally and to Thomas Hain who supervised Martin during his stays at the University of Sheffield and later as the head of AMI/AMIDA speech recognition team.

During his PhD, Martin developed from a somehow crazy and not very systematic guy to a highly qualified researcher in speech recognition. He is skilled in the theory and practical applications of HMMs and has worked with all the important tools that are around (HTK, DuCoder, STK) – where “working with a tool” does not mean pressing a button but a serious scientific work.

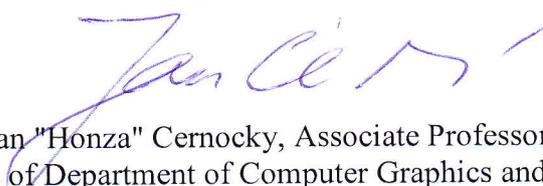
He has become one of the few people on this planet able to fully setup a state-of-the-art large vocabulary continuous speech recognition (LVCSR) system, train it, evaluate and – and this is the most important – think critically about its weaknesses and suggest and implement ways to improve it. The thesis is an example of this capability but it should be considered just as a ‘snapshot’ of Martin’s activities – during the years he has been with Speech@FIT, he has not worked just on English meeting recognition, but on Czech, Arabic, Dutch, in different setups. From the research point of view, he also significantly contributed to the research into probabilistic features, this is not reflected in the thesis.

I must put forward also the aspect of serving the group, AMI/AMIDA LVCSR team and the research community generally. Martin has never refused to help other members of the group, students and others, even if this generated (as is still generating) an extra-load on him, and a need to work in heavily multi-tasking mode.

From the personal point of view, I appreciate Martin’s sense of responsibility, fun and ability to help under any circumstances, and I am the most happy to have him in the group.

To conclude, I fully recommend Martin’s Ph.D. thesis for the defense, I am looking forward to future work with him, and wish him many great hikes in the mountains and iceberg-climbs.

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