

Recommendation for the defense of Ph.D. thesis

Ph.D. candidate: Michal Fapšo
advisor: Jan Černocký

I am happy that Michal Fapšo has submitted his thesis under my supervision (with a great technical supervision help of Igor Szöke and Lukáš Burget), and that his long-years efforts have converged to this day.

Michal's thesis is in the important area of speech data mining, more specifically in so called "zero resource" approaches, making no use of transcribed training data. During his "Querying by Example - QbE" work, he has compared several approaches based on pattern matching and acoustic modeling. He has then concentrated on QbE from pre-generated phoneme lattices which has a potential for making the method indexable with substantial speed-ups. He has participated in several international evaluations in the MediaEval series and worked on approaches that were very competitive therein.

During his thesis work, he has worked with several team-members, most notably with Igor Szöke and with Javier Tejedor during his stay in Brno in 2010. Together, they are authors of influential paper published in ACM Transactions on Information Systems (TOIS, an impacted journal).

The thesis actually covers only part of his activities. He has worked on several projects running in the group, most notably during a project sponsored by the Czech Ministry of Interior from 2007-10, where he contributed with fast speaker adaptation. He was also involved in BUT's successful submission to NIST 2006 STD (spoken term detection) evaluation.

From personal point of view, I appreciate Michal's sense of responsibility, and his strong will to finish this thesis despite working in a commercial company and having all father's responsibilities since April 2013. When he was physically with the group, he never missed the opportunity to help other team members, our international visitors, and was an appreciated teacher of computer labs in several courses.

To conclude, **I recommend Michal Fapšo's Ph.D. thesis for the defense**, and wish him all the best for his future professional and personal life.

In Brno, August 28th 2014



Dr. Jan "Honza" Černocký, Associate Professor
Head of Department of Computer Graphics and Multimedia
Responsible of BUT Speech@FIT group
Faculty of Information Technology, Brno University of Technology
Božetěchova 2, 612 66 Brno, Czech Republic
Tel: +420 5 41141284 Fax: +420 5 41141290, <mailto:cernocky@fit.vutbr.cz>
<http://www.fit.vutbr.cz/~cernocky>, <http://speech.fit.vutbr.cz>