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This is a letter of recommendation for Simon Holmbacka

I have known Simon since the start of his Masters Thesis project in 2010. From March 2011 until December 2015 he was my PhD student. The thesis was accepted with highest grade "with excellence". He is now working as a joint post-doc researcher in my group and at the Univ. of Hagen.

Simons research is centered on the question of how to improve the energy efficiency of software. In particular he is interesting in how to consolidate Quality of Service requirements of many different applications running on a heterogenous platform with the requirements for energy minimization. If at all such requirements are currently implemented in an ad-hoc manner.

Simon is researching both the theoretical framework, as well as implementation techniques for the automated control of the QoS and energy of the system. His a quite produtive researcher, he has co-authored 19 conference, and 4 journal papers.

Simon has several good qualities that are required for a succesful researcher. On the one hand he has a keen grasp of theoretical concepts, and on the other hand he has very good skills in applying these ideas to practice, as he is a very skilled programmer with quite some substantial experience in low-level programming of embedded operating systems. Furthermore he has from the start as a PhD student shown substantial independence and already quite a high-level of maturity as a researcher.

Overall he is a very creative person, who takes responsibility and has good people skills. He is an active participant in research cooperation with our national (Aalto University, Tampere Universty of Technology and Oulu University) and international research partners (Univ. of Granada, INSA-Rennes), and he has started creating his own contact network (with the Univ. of Hagen). He has also taken responsibilities in leading tasks in our larger cooperative reserach projects (ARTEMIS project RECOMP, TEKES project ParallaX). He is actively participating in teaching, and is now responsible for our real-time systems course, which he has revised substantially to make it available on the Coursera MooC platform.

Johan Lilius