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To whom it make concern

Letter of Recommendation, Martin Sandve Alnæs

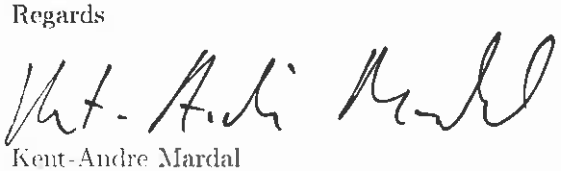
I have known Martin since 2004 when he took two courses of mine. Martin already then demonstrated an unusual interest and ability for natural and computational science. After 2004, I have been his supervisor on his master and PhD thesis.

Since 2004 I have been continuously impressed by Martin's skills and results. At the Scientific Computing department on Simula, a major part of our scientific work is concerned with the development of the FEniCS software package for user-friendly and efficient finite element based simulations. FEniCS is a large international effort between University of Chicago, Argonne National Laboratory, Delft University of Technology, Royal Institute of Technology KTH, Simula Research Laboratory, Texas Tech University, and University of Cambridge. Martin has quickly become a core developer in several of the most important submodules FEniCS because of his unique ability in program development and design. Furthermore, in his PhD, he has solved the most important scalability problem in FEniCS by introducing efficient automatic differentiation of arbitrary complicated PDEs. This is recognized as a major breakthrough throughout the FEniCS community.

Early in his PhD, Martin published a paper in the prestigious medical journal Stroke together with collaborating neurosurgeons. This paper is the first paper ever on Simula to be accepted in a medical journal and it is a significant step for the Scientific Computing department as a whole. This paper has been the featured in 12 Norwegian newspapers and the annual report on Simula.

Martin's impressive results comes from a confident knowledge in mathematics, numerics and programming, combined with very good collaborative skills and the ability to work independently on his part in collaborative efforts. Martin is without a doubt a significant research talent, a team worker, an impressive programmer. He has my warmest recommendations.

Regards



Kent-Andre Mardal
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and Structures