September 27, 2015

To
Alexandru Iosup
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Room HB070.050
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Theodore L. Willke II, EngScD
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Dear Alexandru,

In my role of Senior Principal Engineer at Intel Labs, where I lead a team that researches large-scale machine learning and data mining techniques in the Parallel Computing Lab (PCL), I support you and the MagnaData proposal for a VIDI grant. I have read the proposal and believe that the socially-aware, component-specific resource management and scheduling techniques that result from it will help Intel continue its worldwide leadership in parallel and distributed data-intensive computing.

PCL works in close collaboration with leading academic and industry co-travelers to understand hardware and software architectural implications for Intel's upcoming multicore and manycore processing platforms. We also work closely with our own Data Center Group, and the Cloud Platforms Group in particular, to deliver groundbreaking open source software technologies to the worldwide cloud service provider ecosystem. These technologies meaningfully impact the experience that Intel's customers and partners have with cloud infrastructure and most notably cloud applications involving scalable machine intelligence.

I recently led a venture for Intel called the Graph Analytics Operation, which commercialized large-scale platforms for distributed parallel graph processing. As the venture neared completion of its transfer of data science exploration and deployment technology into what is now known as Intel Discovery Peak and the Intel Analytics Toolkit, the urgent need for better resource management and scheduling technologies became more evident. There is no doubt that the processing pipelines used in the next generation of intelligent applications will test the limits of data center performance and availability, with their demanding mixture of complex (often real-time) stream processing and large-scale batch processing. It's hard to imagine how such applications can succeed without the on-demand scheduling proposed in MagnaData that takes into account per-task requirements.

In my capacity at Intel, I agree to join the MagnaData User Advisory Board. This will effectively continue our successful collaboration over the past few years, in which I have hired two top PhD candidates from your highly-productive Parallel and Distributed Systems Group, including one of your students just this year. I will be actively involved in the yearly meetings of the User Advisory

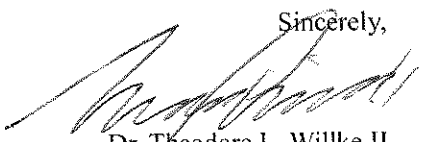
Board, and contribute with advice and feedback throughout the project. I am also interested in interacting with the other members of the User Advisory Board. In return, our teams will receive early access to the technology developed in the project and the possibility to test it against our use cases in high-performance and data-intensive computing, including some of the demanding intelligent applications that I alluded to above.

I understand that Intel will also get early access to open-source software and open-access data released in the project and will further contribute to these through its own participation. Overall, I estimate the total value committed by Intel to MagnaData for the entire duration of the project to over $15,000, or about €13,500, to be paid "in kind". This represents the costs for participation and feedback regarding the User Advisory Board, and the costs for defining and helping to test a relevant use case for Intel Labs and/or the Data Center Group.

I have recently become familiar with the evaluation criteria for VIDI proposals. After reading the MagnaData proposal, I find it to be of extremely high quality and potential impact, and I strongly recommend that it receives funding. I am also familiar with the academic quality of you, your group (the PDS Group), and your graduate students. I am certain that this project, if funded, will execute as planned and with the high academic quality that your research team consistently delivers. Intel is looking forward to helping you transfer of the knowledge created in the MagnaData project to its customers and partners.

To conclude, I fully support you and your VIDI proposal MagnaData proposal. And I am looking forward to this next exciting phase of our continued collaboration.

Sincerely,



Dr. Theodore L. Willke II
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