To: MaRBLe steering committee

Subject: MaRBLe scholarship application

Dear members of the MaRBLe steering committee,

For my MaRBLe bachelor thesis at the Department of Knowledge Engineering I’m involved in a project that is cooperation between the MUMC+ Department of Pathology and CERN, Deparment of Medical Physics, Geneva and I’m being supervised from the Department of Knowledge Engineering.

The aim for my thesis is the analysis of collected patient data using methods that have not been used or applied in a big sense so far. Main disease that is analyzed using this data set is atherosclerosis.

A range of computationally intensive methods are being used such as the Network Simplex method, Weighted Gene Co-Expression Network Analysis, Clustering techniques , Regression models, Control theory and Reverse Network Engineering.

One of the lead researchers in this project, Dr. Marco Manca, is based at CERN. The research would greatly benefit from a visit to CERN during the thesis period, because it will allow for better knowledge and experience transfer between me and Dr. Marco Manca and his team. Mr. Manca, already has experience and has done some research work in this field and similar topic. Also, it will allow for possible usage of some high-tech, advanced computing located at CERN. The following learning objectives are expected to be met: Better look into practical sides of above mentioned methods and transfer/exchange of experience and knowledge with already experienced team of researchers.

The program of the visit is: SPECIFY

The budget of €1000 will be used to accommodate a stay in Geneva that is as long as possible. Expected is that the travel costs will amount to €200 and with alternative lodging the remaining €800 will cover living expenses for a 10 day stay.

This application is endorsed by Prof. Dr. Ir. Eric Biessens, Dept. Pathology, Dr. Joël Karel, Dr. Evgueni Smirnov and Dr. Zita Soons, Dept. Knowledge Engineering.

If you require any further information, I’ll gladly be of your assistance.

Best regards,

Taghi Alyev, Bachelor student Knowledge Engineering