Dear Dr. Jens-Peter M. Zemke,

I would like to ask for some advice as I found that you work in the coordination of the MLE group at the TUHH. Right now I’m in my 5th semester of IMPICS and my situation is basically as follows, I’m a working student and I have found a project that I think it has the potential to be my master thesis. This project is of the interest of the company where I am—Neura Robotics GmbH, and I have already mailed some of the potential professors that could have been interested on it. Nevertheless, I have been told that currently there are already many students being supervised or that the main application differs from their research line. Therefore, there is at the moment no fit for me.

I am a bit afraid—and at the same time conscious—that being an external project might also make the search a bit more complicated.

As a brief summary of the project:

It focuses on porting a Speech Recognition inference algorithm using RNN to an embedded device, following the approach of decentralizing the AI features from the main CPU+GPU to edge devices. This embedded device is aimed to be integrated into a Robot that makes use of an RT-capable industrial protocol for its internal communication between devices. I currently work in the firmware of one of such communication devices and I would then start with AI integration in low-power architectures—like ARM or K210 processor.

The project has clearly a strong practical part, but also clearly belongs to contemporary and also research-related topics such as LSTM/GRU NN optimization for low-power devices or usage of Neural Network Compilers (front- and backend optimization).

In relation to the company, Neura Robotics GmbH has shown interest for supporting relations between academia and industrial robotics, as it is a young team and they look forward to put into practice approaches with cutting edge technologies. I have even found who will support me from the company’s side.

Therefore, my questions to you are then, how likely is to find a space for this project among the professors in MLE that could be supervisors? What would a better approach be like that does not push too hard, as a first response has already been given? Is there already any instance that connects such ML-related projects or that provides guidance?

Last but not least, as I’m still learning German, my English is significantly more accurate, specifically in technical issues. That is also the main reason why I chose it to redact my first emails, but at the same time I’m starting approaching in German. I mentioned this, since I don’t want you to hesitate to mention any approach that involves interaction in German.

Thank you in advance for your comments.

Best regards.

Carlos Reyes