



Eidgenössische Technische Hochschule Zürich  
Swiss Federal Institute of Technology Zurich  
Politecnico federale di Zurigo

## Letter of Reference for Michael Egli

*Written by Dr. Alessandro Pasetti on Jan. 3<sup>rd</sup> 2006*

Mr. Michael Egli has worked as a software engineer in the *Control Engineering Group* of the *Institute für Automatik* at ETH-Zurich for a period of two years starting in Feb. 2005. I was his supervisor throughout this period.

During his stay at ETH, Mr. Egli worked on two main projects. In the EODiSP project, he contributed to the development of a simulation infrastructure based on the HLA Standard (an IEEE simulation standard). His main responsibilities were the specification, design, and implementation of the simulator user interfaces and of a distributed repository for simulation models.

The EODiSP was an industrial project done under a contract with the European Space Agency and with a Zurich-based company (P&P Software GmbH). Mr. Egli's work included interactions with the customers and the installation and performance of the final acceptance tests for the simulation infrastructure on the customer premises. The EODiSP simulation infrastructure is now publicly available through a dedicated project web site and is described in a paper co-authored by Mr. Egli and recently presented at a simulation conference. The European Space Agency are planning to use the EODiSP as their default simulation platform for future earth observation missions.

In his second project (the ASSERT project), Mr Egli participated to the definition and demonstration at prototype level of an innovative concept for the development of software frameworks for embedded control systems. The proposed concept was innovative in being model-driven and proof-based. Mr. Egli contributed to the implementation of a formal verification approach (to prove that the design models implement their requirements) and to the development of automatic code generators (to automatically transform the models into source code).

ASSERT is an R&D project funded under the EU IST Programme which involves over twenty industrial and academic participants and has a budget exceeding 10 MEUR. The work done by Mr. Egli has resulted in two publications of which one was published in high-level academic proceedings (the LCNS series).

Mr. Egli has demonstrated great versatility in being able to work on, and produce valuable results for, both application-oriented industrial projects and academic-oriented research projects. He is competent in all areas of modern software engineering and willing and able to integrate his knowledge with new results and with inputs from colleagues and business partners. He is a team worker and his contributions and readiness to help have been appreciated by all members of our group.

Mr. Egli has clearly demonstrated to be a competent software engineer with an ability to master complex problems, to propose theoretical solutions for them, and to apply them to concrete industrial applications. Based on his background and on the results he achieved while in ETH, I am sure he will do very well in any position he may choose to take up after he leaves our group.

Alessandro Pasetti