University of Zurich
Department of Informatics

Andreasstr. 15
CH-8050 Zürich
Tel. +41 44 635 43 20
Fax +41 44 635 45 07
pfeifer@ifi.unizh.ch
www.ifi.unizh.ch

Prof. Dr. Rolf Pfeifer
Artificial Intelligence Laboratory

To Whom It May Concern

Zurich, November 1, 2005

Letter of reference

Mr. Martin F. Krafft, born on February 14, 1979, with residence in Zurich, Switzerland, was employed at our laboratory as a teaching and research assistant, and voluntary system administrator from September 2002 until October 2005.

During this time, Mr. Krafft actively worked on two European research projects, as well as a project submitted to the Swiss National Science Foundation:

- **ADAPT: Adaptive Development Approach to Presence Technologies**
  This project seeks to study the process of building a coherent representation of visual, auditory, haptic sensations in human infants and artificial agents, and how this representation can be used to describe/elicit the sense of presence.
  As part of the project, Mr. Krafft co-designed an artificial humanoid head with a stereo active vision system, and programmed the interface drivers for Linux and Windows. He worked with the manufacturer on the design of a corresponding torso and arm, actuated with artificial, pneumatic muscles. Mr. Krafft was also in charge of several administrative tasks in the first two years of the project.
  RobotCub: An Open Framework for Research in Embodied Cognition
  In this project, 16 laboratories joined efforts to create a hardware and software robotic platform modeling a two year old infant, designed to unify humanoid research across the numerous labs working in this field.
  Mr. Krafft started the design of a programmatic framework for neurobiologically inspired learning models using the ligand-receptor concept, which we hope to deploy among the members of the consortium.
- **EES: the Embryogenic Evolutionary System**
  This project aims to further research on the aforementioned ligand-receptor concept, a new approach to artificial neural networks, which models certain aspects of chemical processes in the brain that influence neural processing.

In his role as university staff member, Mr. Krafft assisted several courses, organized lab sessions for students, and supported students with their questions and problems during as well as outside the lecture times. His patience and his abilities to find ways to make complex concepts accessible to the students was very well received. He also supervised several semester projects by students.

Furthermore, Mr. Krafft had the task to design, implement, and maintain all groupware components related to our successful experiment in global teaching, "The AI Lectures from Tokyo", which united a community of roughly 1000 members from seven universities (Tokyo, Beijing, Jiddah, Warsaw, Łodz, Munich and Zurich) around a lecture series in a fully interactive videoconferencing setting. He completed this work to our fullest satisfaction.

At our laboratory, Mr. Krafft regularly helped other staff members with computer problems. He administered our group's communication and file exchange server, and set up and maintained our cluster of 40 Linux nodes used for distributed computation in various projects, as well as student hands-on sessions.

He was always honest, reliable, and did his best in all the projects. His humor and his authentic character were highly appreciated by all his colleagues. He was open-minded in discussions, and followed the research of his peers with interest.

Mr. Krafft plans to pursue a Ph.D. in open source research, a field we cannot offer as part of our research program.

We support his decision even though we regret his departure very much. We thank Mr. Krafft for his commitment and great involvement at our laboratory, and wish him all the best in his future career.

Yours sincerely

Prof. Dr. Rolf Pfeifer

Director Artificial Intelligence Laboratory