SHAFAI, Esfandiar	
Present Position:	Lecturer at the Mechanical Engineering Department of the Federal Institute of Technology in Zürich (ETH Zürich)
Address:	Institute for Dynamic Systems and Control (IDSC) Sonneggstrasse3, ML K37.4 ETH-Zentrum CH-8092 Zurich, Switzerland
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Born in Tehran, Iran, July 5, 1954, citizen of Switzerland and Iran

Degrees/Higher Education

1979 Dipl. Masch.-Ing. ETH (Master of Science in Mechanical Engineering)

1990 Dr. sc. techn. ETH

Research

1981 - 1990Development and construction of an Engine test bench with the capability of hardware-in-the-loop for dynamical tests and vehicle emulation on sparkignited (SI) Engines (Topic of my doctoral dissertation). 1986 - 1996Head of the engine group at IDSC with the goal of developing mathematical models for the SI-engines as well as designing robust air-to-fuel-ratio (Lambda) controllers to meet the emission standards. 1991 - 1997Head of a research group within the Hybrid-III project of the ETH Zürich with

the goal of developing mathematical models of the Hybrid drive-line as well as developing controller for the engine and the transmission system of the Hybrid-III car.

1997 - 2005Head of the heat pump group at IDSC as well as project leader of several heat

> pump projects of the Swiss Federal Office of Energy (SFOE) with the goal of optimizing the operation of the heat pumps in the dwelling-houses. The main research focus was on the fault detection as well as adaptive control of the

heating system based on weather forecast.

List of publications: http://www.idsc.ethz.ch/people/staff/shafai-e

Teaching/Advising

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1979 – 1990	Teaching Assistant at IDSC (ETH Zürich) for System Modeling and Control.
1990 – 1995	Supervisor of teaching assistants at IDSC (ETH Zürich).
1995 – 2005	Lecturer for teaching Control at BS and systemidentification at MS level at the
	Mechanical Engineering Department of ETH Zürich (D-MAVT).
1995/10/2-4 and	Introductory course on parameteridentification offered for the participants
1996/10/2-4	from industry and from the technical colleges of higher education.
2004 – present	High school teacher in Mathematics (part time).
2005 – 2007	Advisor of prospective students at D-MAVT in the pilot project ACAP
	(Academic and Career Advisory Program) of ETH-Zürich.
2007 – present	Supervisor of phd-students at IDSC for organizing and carrying out the
	exercises and the exams in the following lectures: Control Systems and
	System Modeling at BS level as well as Digital Control Systems at MS level.
2012 – present	Lecturer for System Modeling and Digital control Systems at D-MAVT.