Ivo Vondrák

dekan, Fakulta elektrotechniky a informatiky, Technická univerzita Ostrava

Professional Capability Summary: Software engineering, Modeling and Simulation, Artificial Intelligence

Experience

- 1983 - 1988 Research at **Institute of Coal Mines Ostrava**. Modeling and simulation of continuous and discrete systems. System for modeling of vertical transport in deep coal mines. Program system for numerical solving of differential equations of motion. System for modeling of manufacturing systems by Monte-Carlo methods.
- 1986 - 1989 External lecturer at **Technical University of Ostrava**. Dynamics of Mechanical Systems.
- 1989 - 1990 Assistant professor at **Dept. of Robotics**. Simulation of robots. Artificial Intelligence.
- 1990 - 2003 **Head of Dept. of Computer Science**. Software Engineering - Object Oriented Analysis and Design, Software Process, Object Oriented Programming, Process and Workflow Systems - Methods for process modeling, Workflow systems design and implementation, Internet for workflow systems, Artificial Intelligence - Expert systems, Neural Networks, Genetic Algorithms.
- 1989 - 1995 Visiting professor at **Palacky's University of Olomouc** (Dept. of Computer Science). Artificial Intelligence, Neural Networks.
- 1992 - 2002 Visiting professor at **University of Leoben (Austria)**. Artificial intelligence. Object-oriented Software Engineering. Modeling and Simulation.
- 1993 - 1994 Research Grant *"Process Asset Engineering Facility"*. **Texas Instruments, System and Information Science Labs, Dallas, TX**. Formalizing of software process. System for software process modeling, simulation and enactment.
- 1994 - 1995 Research Grant *"Interaction Coordination Nets"*. Texas Instruments, System and Information Science Labs, Dallas, TX. Business Process modeling, simulation and enactment.
- 1995 - 1996 Research Grant *"Distributed Interaction Coordination Nets"*. Texas Instruments, System and Information Science Labs, Dallas, TX. Business Process modeling, simutation and enactment in a distributed computing environment.
- 1996 - 1997 Member of technical staff at **Software Research Laboratory, Texas Instruments, Inc., Dallas, TX.** Responsible for project and studies dealing with process and workflow automation including the use of Internet technologies for workflow systems implementation.
- 1997 - 1998 Project UNDP *"Business Process Modeling"*. Method **BPM** (**B**usiness **P**rocess **M**odeling) for visualization of process definition and analysis.

	• 1999 - present Research Project*"Modeling and Implementation of Distributed Processes"*. This project is sponsored by the Czech Government. • 2003 - present **Dean of the Faculty of Electrical Engineering and Computer Science** at Technical University of Ostrava.