CURRICULUM VITAE

PERSONAL DATA

Name	**JÁNOS MÁRKUS, PH.D.**
Home address	**H-1204 Budapest, Hungary**
E-mail, web	**janos.markus@mit.bme.hu, http://mit.bme.hu/~markus/indexe.html**
Nationality	Hungarian
Place and date of birth	Tata, Hungary, 1976
Marital status	Married, two children

CURRENT AFFILIATION

• Date	1999–
• Company	**Budapest University of Technology and Economics,** Faculty of Electrical Engineering and Informatics, Department of Measurement and Information Systems, Magyar Tudósok krt. 2. I. ép. I.E.444., H-1117 Budapest, Hungary
• Assignment	Ph.D. student (1999-), assistant lecturer (2003-), senior lecturer (2005-)

EDUCATION

• 1999–2004	**Budapest University of Technology and Economics**, Faculty of Electrical Engineering and Informatics, Department of Measurement and Information Systems. Ph.D. student in Electrical Engineering (Summa cum laude Ph.D. degree, 2005).
• 1994–1999	**Budapest University of Technology and Economics**, Faculty of Electrical Engineering and Informatics, Department of Telecommunications. M. Sc. degree in Electrical Engineering (excellent, 1999).
• 1990–1994	**József Eötvös High School, Tata,** branch of natural sciences (excellent final exam, 1994).

PERSONAL SKILLS

NATIVE LANGUAGE

Hungarian

LANGUAGES

English, fluent

German, basic communication

PROGRAMMING LANGUAGES

Advanced level: Matlab, Simulink, C, Motorola 56300 and ADSP2100 assembler
Basic level: html, xml, php

DRIVING LICENSE

Full, clean.

AWARDS

• 2003, 2005	*Werner von Siemens Excellence Award* for Ph.D. student's work (2003) and for Ph.D. thesis (2005).
• 2004	*Year 2004 Prize* awarded by the Dimitris N. Chorafas Foundation for Ph.D. student's work (shared).
• 2003, 2004	*László Schnell Award* (2003) and *László Schnell Publication Award* (2004) for Ph.D. students by the László Schnell Instrumentation and Measurement Foundation founded by the Department of Measurement and Information Systems.
• 2000	*Master Theses' competition* arranged by the Scientific Society for Optics, Acoustics, Motion Pictures and Theatre Technology (OPAKFI) and by the Hungarian Section of the Audio Engineering Society (AES), 1st prize.
• 1999	*Scientific Contest of Students* at the Faculty of Electrical Engineering and Informatics, 1st prize (signal processing session).

EDUCATIONAL ACTIVITIES

• Lectures	Embedded Systems (in English), Measuring Systems (in English), Musical Signal Processing
• Laboratories	Measurement Laboratory, Digital Signal Processing
• Supervising	Project laboratory works, works for scientific contest of students and Master's theses.

RESEARCH FIELDS

• Delta-Sigma A/D converters	Structure of Delta-Sigma analog-to-digital converters and their applications to instrumentation and measurement.
• Quantization noise analysis	Testing methods of A/D converters.
• Musical signal processing	Sound synthesis algorithms (organ pipe sound modeling).

DEVELOPMENTS

• Delta-Sigma A/D converters	Development of nonlinear models of Delta-Sigma converters in Matlab-Simulink environment.
• Quantization noise analysis	Development of A/D testing software implementing the IEEE-STD-1241-2000 standard and additional features in Matlab.
• Musical signal processing	Development of sound synthesis algorithms in Matlab, C and assembler languages.

EXPERIENCE

• Date	2003–
• Company, assignment	**Gamax Ltd.,** Consultant and application engineer
• Main activities and responsibilities	Occasional presentations, trainings, seminars and demonstrations of the Matlab and Simulink software family products, (on the fields of signal processing, system identification, embedded system development). Engineering consultations.
• Date	2001–2002
• Company, assignment	**Oregon State University**, School of Electrical Engineering and Computer Science, Exchange visitor, Trainee
• Main activities and responsibilities	Optimization of Delta-Sigma A/D converter structures and research on new architectures for instrumentation and measurement.
• Date	1999–2000
• Company, assignment	**Panda Audio Ltd**., R&D engineer
• Main activities and responsibilities	Development and implementation of musical signal processing algorithms.

PUBLICATIONS

• Papers in Periodicals	Seven publications in international periodicals, in English.
• Conference Papers	Fifteen papers presented on various domestic and international conferences, in English.
• Patent	One shared international patent application.
	The detailed list and downloadable versions of the publications are available online at http://mit.bme.hu/~markus/publist.html.

Budapest, January 19, 2007