

Curriculum vitae

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Name: Antal Járαι

Nationality: Hungarian

Born: 25th August, 1950, Biharkeresztes, Hungary

Permanent address: Institute of Computer Science, Department of Computer Algebra, Eötvös Loránd University, H-1117 Budapest, Pázmány Péter sétány 1/C, Hungary.

Education: Mathematics (1969–1974), Kossuth Lajos University, Debrecen, Hungary. M.Sc. (1974), Ph.D. (1976), Kossuth Lajos University, Debrecen, Hungary. Candidate of Mathematical Science degree (1990), Hungary. After the re-introduction of habilitation in Hungary I received this degree too (1996). D.Sc. degree (2001), Hungarian Academy of Sciences.

Positions held: Scholarship of the Hungarian Academy of Sciences 1974–1976, Junior Research Fellow 1976–1978, Senior Research Fellow 1978–1991, Research Professor 1991–92, each at the Department of Mathematics and Computer Science, Kossuth Lajos University, Debrecen. From 1992 to 1997 Senior Research Fellow at Institute of Mathematics and Computer Science of Universität GH Paderborn, Germany. From 1997 to 2001 Research Professor, and from 2001 Professor at the Eötvös Loránd University, Budapest. Visiting the University of Waterloo, Canada in 1982 for 6 weeks and in 1998 for 4 weeks. Visiting Rutgers University, New Jersey, USA in 1997 for 2 weeks and several times Universität GH Paderborn, Germany.

Field of interest: Functional equations, measure theory, system programming, computational number theory and computer algebra, generalized number systems.

Teaching experiences: Undergraduate and graduate courses in calculus, measure theory, complex function theory, integral transforms, functional analysis, probability theory, orthogonal series, differential equations, harmonical analysis, topological groups, Haar measure and applications, functional equations, topology, compilers, prime tests, fractals and number systems, factorization, computational number theory, discrete mathematics, RISC processors.

Professional experiences: Author of over 20 system programs in assembly. Manager and co-author in the development of 8 application systems. Project manager in the group of Karl-Heinz Indlekofer in 3 projects in computer science resulting in more than 10 “world records”. Leader of 2 project and former fellow in 12 other ones in mathematics in Germany and in Hungary.

Publications: 4 theses, 3 book, 7 lecture notes, over 60 papers, over 40 conference talks, over 40 software copyright, over 20 program plans and technical reports.

Membership: President of the Hungarian T_EX Society. Member of Bolyai Mathematical Society, John von Neumann Computer Science Society, Public Body of Hungarian Academy of Sciences, editorial board of Publ. Math. Debrecen, Ann. Univ. Sci. Budapest Sectio Computatorica, Alk. Mat. Lapok.

Awards: “Pro Universitate”, Kossuth Lajos University, Debrecen, 1974. “Grünwald Géza award”, Bolyai Mathematical Society, 1979. Ministry award of the Ministry of Culture, 1990. Award “For outstanding contribution to the conference”, International Symposium on Functional Equations, 1994. Award of the Hungarian Academy of Sciences, 2000.

Languages: English, German and some Russian.

Personal status: Married since 1982, wife is Járainé Matisz Ilona, programmer. One child from this, and two children from the first marriage. They are 18, 29 and 32 years old, respectively.

Hobbies: Physics, chemistry, electronics.

My main research field is functional equations. For a large class of functional equations my results show that measurable solutions are C^∞ . This solves the second part of Hilbert’s fifth problem for the class in question. Other research fields are measure theory, generalized number systems and applied mathematics. I wrote more than 20 system programs (compiler, time sharing system, floating point package, etc.) and several other programs for microprocessor systems. I have joint results with Karl-Heinz Indlekofer in computational number theory. We hold several “world records” in this field. My programming experience consists of writing over 3500 pages of programs. I have written over 50 research papers; one of them is the separate issue CCXXXIII of *Dissertationes Mathematicae*. I have written a booklet “Regularity properties of functional equations”, two books “Measure and Integration Theory” and seven text books “Analysis and Probability Theory”, “Modern Applied Analysis”, “Computational measure theory”, “Discrete mathematics”, “Calculus I”, “Calculus II” and “Calculus III”.