

Aleksandar (Aljoša) Jovanović (1949 - 2020)

Aljoša was born in Split in 1949 and raised in Belgrade, where he attended elementary and high school. He graduated at the Faculty of Mathematics in Belgrade in 1970. The PhD in mathematics (set theory – real measurable cardinals, theory of ultraproducts) he obtained at the same faculty in 1982. For thirty years he worked as a professor of mathematics at the universities of Rijeka, Niš, Kragujevac and Belgrade. He became an associated professor at the University of Kragujevac in 1990. From 1975 till 2000 he was a part time research fellow of the Mathematical Institute of the Serbian Academy of Sciences and Arts. The last 18 years of his teaching career he worked at the Faculty of Mathematics in Belgrade, where he retired in 2014. He was also a very skillful programmer, a passionate astronomer, piano and organ player, skipper and diver. He fluently spoke English, French, Italian and Russian. He is survived by his spouse, two daughters and four grandchildren.

During the academic career he taught undergraduate and graduate courses in mathematical logic, set theory, artificial intelligence, discrete mathematics, linear algebra, computer science, programming languages and databases. He was advisor of three PhD theses and twelve master theses at the Faculty of Mathematics in Belgrade. Either as a visiting scholar or as an invited lecturer he worked at numerous renown universities including University of California at Berkeley, California Institute of Technology, University of Edinburgh, University of California at Los Angeles, Stanford University, University Paris VII, University of Copenhagen, University of Exeter, University of Bratislava, University of Ioannina, Moscow State University Lomonosov and Sankt Petersburg Technical University.

Aljoša's research interest was primarily in set theory, and theoretical computer science (automated reasoning, automated theorem proving, intelligent systems, signal and image processing). He published more than 90 papers in renowned mathematical journals and conferences. He is an author of one undergraduate textbook, two graduate textbooks, and more than 10 chapters in monographs. Throughout his entire academic career he worked as a researcher on numerous scientific projects supported either by the national government, or by

the EU administration. In particular, he was the head of four applied research projects of Serbian Ministry of Science in the early nineties, the national coordinator and the advisory board member of the European NEUROMATH project from 1987 till 1993 and the managing committee member of the same project form 2008 till 2011. He was an active reviewer for several journals and conferences. In 2004 he was the advisor to the chief coordinator of the Mathematical Olympiad in Athens.

At the Faculty of Mathematics he held seminars in set theory, applied logic, software architecture, digital image and signal processing in biomedicine and technics and artificial intelligence. His particular focus was on the Group for Intelligent Systems, where in cooperation of numerous generations of undergraduate and graduate students he developed various software solutions for signal and image processing, CCD microscopy, theorem provers for monadic calculus, modal logic and algebra based on quantifier elimination and interpretation method. Four teams of his students received the University of Belgrade annual student reward for best scientific contribution. Six times his students received awards of the ETRAN national conference for the best paper of the young researchers in artificial intelligence.

Before the university, Aljoša worked as a programmer in Honeywell Information Systems from 1971 till 1975 and as the leading programmer of the Software Development Division of the Federal National Bank from 1975 till 1984. He was also a development director in Vesta Company in 1995.

Classical music, astronomy, sailing and diving were his lifelong passions. Aljoša was a piano and organ player. He installed 23 telescopes (seven different types, lances diameter ranging from 11cm to 45cm) on various locations in Serbia. On his boat Belina he sailed more than 40000 nautical miles. He dived for more than 3000 hours. During the service in the national navy he was a diving instructor. In the early eighties he was the president of the Parachute and Scuba Diving Club in Belgrade. He actively participated in production of underwater TV films, underwater archaeology excavations and underwater tech support. For the national TV he has done around 50 reports on various scientific topics.

## Aleksandar Perović

The photo was taken by our late friend Dragi Radojević in 2006.

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