Lotfi A.Zadeh's life and his scientific legacy. Our scientific activities after his 5-year death

Professor Shahnaz N. Shahbazova, Ph.D., D.Sc.

Azerbaijan National Academy of Sciences,
Institute of Control Systems
Department of Digital technologies and applied informatics
Azerbaijan State Economic University,
Baku, Azerbaijan
shahbazova@cyber.az
shahbazova@unec.edu.az
shahbazova@gmail.com

Abstract: This paper describes Professor Lotfi A.Zadeh's life and his scientific legacy. The work begins with his birthplace, Baku, Azerbaijan, as well as the period of residence in Baku from birth until he was 10 years old. After that, he moved to Iran, where he lived from until he turned 23 years old. Afterwards, he moved to the States for the purpose of getting an education. The paper also describes Studying and working in the States (Doctoral studies) and some information about his Family. Zadeh's articles and the first results of scientific work, as well as Scientific discoveries (how the theory was born, the history of this theory and features) are described in this work too.

His collaboration with other scientists (his teacher Norbert Wiener, Rudolf Kalman, Charles A.Desoer and others) is written in detail in this paper. The paper describes scientific life by years to the last stage of life. The very important conferences and symposiums that he participated in and made presentations as a keynote speaker are described in this paper.

The paper also describes his visit to his country of origin, Azerbaijan, and participated in International Exhibition Telecommunications and Information Technologies - BakuTel2008 as well as attended reception of the President of Azerbaijan and met with his close scientific friends.

In this papers given information for 5 years since he was not with us. We have held 2 conferences: in 2018 7th World Conference on Soft Computing dedicated to the scientific activities of Professor Lotfi Zadeh and 2022 - the 8th and 8th World Conference on Soft Computing dedicated to the scientific activities and 100 anniversary birthday of Professor Lotfi Zadeh. We have published 3 books - two of them are selected papers from the conference and we dedicated one book in one year of his death. We continue to work on his theories and ideas in the future, we continue to hold subsequent conferences dedicated to the scientific activities of Professor Zadeh.

Problems Difficulties in Recognizing   Flat Figures

Professor Shahnaz N. Shahbazova, Ph.D., D.Sc.

Azerbaijan National Academy of Sciences,
Institute of Control Systems
Department of Digital technologies and applied informatics
Azerbaijan State Economic University,
Baku, Azerbaijan
shahbazova@cyber.az
shahbazova@unec.edu.az
shahbazova@gmail.com

Abstract. The paper explores classes of visual objects that have not yet received a stable solution, and private methods need artificial adjustments with subsequent difficulties with integration into the general and completely harmonious mode of the system. Flat figures act as one of these classes, and a model of particular approaches to problem classes of objects is built on the solutions of problems associated with them.

Keywords: Recognizing Flat Figures, Artificial Adjustments, Recognition Stability, Artificial Personality

Dr. Shahnaz N. Shahbazova received the academic degree of PhD in 1995, the academic title of associate professor in 1996, the academic degree of Doctor of Sciences in Engineering 2015. Since 2002, she has been an academician, and since 2014, Vice-President of the Lotfi A. Zadeh International Academy of Sciences. Since 2011, she has held the position of General Chairman and organizer of the World Conference on Soft Computing (WConSC), dedicated to the preservation and development of the scientific heritage of Professor Lotfi A. Zadeh. She is an honorary professor at the University of Obuda in Hungary and the "Aurel Vlaicu" University

of Arad in Romania, an Honorary Doctor of Philosophy of Technical Sciences of the UNESCO International Personnel Academy.

She is a member of the Board of Directors of the North American Society for Fuzzy Information Processing (NAFIPS); moderator of the Berkeley Soft Computing Initiative (BISC) group; member of the council 3338.01 "System Analysis, Management and Information Processing" for the defense of PhD and doctoral dissertations, as well as chairman of the seminar of the same council at the Azerbaijan Technical University.

Dr. Shahbazova participated in many international conferences as Organizer, Honorary Chair, Session Chair, member in Steering, Advisory or International Program Committees and Keynote Speaker. She is a president of Fuzzy System Association in Baku.

She's awards: India - 3 months (1998), Germany (DAAD) - 3 months (1999, 2003, 2010), USA, California, Berkeley University (Fulbright) - (2007-2008, 2012, 2015, 2016, 2017). She is the author of more than 176 scientific articles, 8 methodological manuals, 9 textbooks, 2 monographs and 7 Springer publications. Her research interests include Artificial Intelligence, Soft Computing, Intelligent Systems, Machine Learning Methods for Decision Making and Fuzzy Neural Network.