80th Anniversary of the birth of Prof. Donald Knuth (1938)

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In this year one of the most famous people in theoretical Computer Science Prof. Knuth celebrates his 80\textsuperscript{th} birthday \cite{1,2,3,4}.

Donald Knuth was born on January 10, 1938, Milwaukee, Wisconsin, U.S. He is a computer scientist, mathematician, and professor at Stanford University. His achievements are mainly in algorithm’s analysis and computational complexity. Knuth is the creator of the \TeX computer typesetting system. He is the author of a book on computer programming language compilers. Knuth decided that there is no adequate description of computer science theory which motivated him to write the fundamental book “The Art of Computer Programming” which is among the most influential books in Computer Science ever as well as it is among the most cited books nowadays in this field. His

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idea to present Computer Programming as an art was nonstandard in these days. When Knuth decided to write the book he made plans for six volumes, at the end the book appeared in seven volumes.

Before publishing the first part of “The Art of Computer Programming”, Knuth left Caltech and became an employee of the Institute for Defense Analyses’ Communications Research Division. His main duties involved serious mathematical research in cryptography.

Knuth’s ideas are developed further by many scientists. We too worked on improving some of the algorithms from “The Art of Computer Programming”, vol. 2, [5]-[12]. Some algorithms developed mainly by Prof. Knuth are optimized and the new realizations are processor’ and compiler’ independent [5]. The book [5] and the paper [7] are personally dedicated to him.
Figure 2: Photos of the covers of vol. 1 and vol. 2 of Knuth’s book (sources are from https://www.wikipedia.org/).
Figure 3: Photos of the covers of vol. 3 and vol. 4 of Knuth’s book (sources are from https://www.wikipedia.org/).
Figure 4: Photo of all Knuth’s books, by Hector Garcia-Molina, March 15, 2015.

Figure 5: The book which we dedicated to Prof. Knuth in 2018 [5].
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References


