Bits & Bytes

DONALD E. KNUTH TO RECEIVE THE 2011 ABACUS AWARD FROM UPSILON PI EPSILON

Jeffrey Popyack

The Executive Council of Upsilon Pi Epsilon is proud to announce that Stanford Computer Scientist Prof. Donald Ervin Knuth is the recipient of the 2011 Abacus Award. This award will include a specially engraved abacus and a cash award. It will be presented at the 2011 UPE Annual Convention, held in Dallas, Texas on March 11, 2011 in conjunction with the ACM SIGCSE Annual Symposium. Prof. Knuth, Professor Emeritus of The Art of Computer Programming at Stanford, will address the convention attendees following the award presentation.

In lieu of a static presentation, Prof. Knuth will conduct an interactive dialog with attendees, entitled "All Questions Answered".

UPE's most prestigious award acknowledges that while the computing and information disciplines arose in the twentieth century, "the heritage of computing ... stems to the origins of humanity. The Abacus, the earliest and most used calculating device, symbolizes this heritage" [6]. The Abacus Award was created for the purpose "of recognizing outstanding individuals who have provided extensive support and leadership for student-related activities in the computing sciences".

Prof. Knuth has been the recipient of most of the major science and related awards including the first ACM Grace Murray Hopper Award (1971), Turing Award (1974), National Medal of Science (1979), John von Neumann Medal (1995), Harvey Prize (1995), and the Kyoto Prize (1996).

Numerous biographical articles have been written about Prof. Knuth. We refer readers here to an interview published in Stanford Magazine [5], his website [3], and of course, his page on Wikipedia (with the usual disclaimers). These are strongly recommended readings for people intending to attend his Q&A session.

Knuth's technical writings in the computing and mathematics fields are well known to ACM members. His writings in other fields may be less familiar. His book "3:16 Bible Texts Illuminated" [1] resulted from a year-long Bible study series he conducted. Employing a systematic study via stratified sampling, he selected chapter 3, verse 16 from each book of the Bible (for which such a verse exists) and delved into the meaning, backstory, and implications thereof. He has also published transcripts of a series of public

lectures on the subject of faith and science, "Things a Computer Scientist Rarely Talks About" [2]. Included is a lecture entitled "God and Computer Science," which examines topics from the point of view of a computer scientist.

Allow me to conclude with a few tidbits gleaned from the sources cited below:

- Like Upsilon Pi Epsilon, Donald Ervin Knuth was born on January 10.
- He stands while working at his computers.
- On a page entitled "Knuth versus email", he says "I have been a happy man ever since January 1, 1990, when I no longer had an email address. I'd used email since about 1975, and it seems to me that 15 years of email is plenty for one lifetime... Email is a wonderful thing for people whose role in life is to be on top of things. But not for me; my role is to be on the bottom of things" [3].

To put this in perspective: By the time AOL for DOS was launched in February 1991, inviting your parents, kids and spouses to get connected, before the World Wide Web, widespread internet viruses, spam, Nigerian business propositions and the like, Knuth had already moved on. On a related note, his website does not list a Twitter ID.

- His website contains photographs of more than 1000 diamondshaped highway signs he and his wife have encountered while traveling, along with their GPS coordinates.
- There is also a minor planet named in his honor, "(21656) Knuth", a distance of 2.71 AU from the Sun. It is estimated to be 4-5 km in diameter and completes a revolution in 4.46 years [4].

Finally, his website features a Frequently Asked Questions list. The second question listed is "When is Volume 4 coming out?" So, do you want to know the answer? Or are you wondering perhaps what the first question is? It's time to do some reading. See you in Dallas! Ir

References

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Categories and Subject Descriptors: A.0 [General]: Biographies/

autobiographies; K.2 [History of Computing]: People

General Terms: Human factors

Keywords: Upsilon Pi Epsilon, Abacus Award, Donald Knuth

DOI: 10.1145/1929887.1929899

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