Biographical Sketch-Doron Zeilberger, P.I.

a. Professional Preparation

University of London, Mathematics, B.Sc. (With First Class Honours), 1972.

Weizmann Institute of Science, Mathematics, Ph.D., 1976.

Institute for Advanced Study, Mathematics, member, 1977-1978.

b. Appointments

2001-present: Rutgers University, Board of Governors Professor

1990-2001: Temple University; Professor (1990-1999). Laura H. Carnell Professor(1999-2001),

1983-1990: Drexel University, Professor (1988-1990), Associate Professor (1983-1988).

1982-1983: University of Pennsylvania, Lecturer.

1980-1982: Weizmann Institute of Science, Senior Scientist.

1979-1980: University of Illinois, Urbana, Visiting Lecturer.

1978-1979: Georgia Institute of Technology, Visiting Assistant Professor.

c. (i) Five Relevant Publications

1. (With M. Petkovsek and H. S. Wilf) A=B, AK Peters, Wellesley, (1996).

2. (With Manuel Kauers and Christoph Koutschan, *A Proof Of George Andrews' and David Robbins' q-TSPP Conjecture*, Proceedings of the National Academy of Science, **108**(6) (Feb. 8, 2011), 2196-2199

3. *Theorems for a price: Tomorrow's semi-rigorous mathematical culture*, Notices of the Amer. Math. Soc. **40 # 8**, 978-981 (Oct. 1993). Reprinted: Math. Intell. **16**, no. 4, 11-14 (Fall 1994).

4. *A Holonomic systems approach to special functions identities*, J. of Computational and Applied Math. **32**, 321-368 (1990).

5. (With A. Baxter) *The Number of Inversions and the Major Index of Permutations are Asymptotically Joint-Independently Normal*, Personal Journal of Shalosh B. Ekhad and Doron Zeilberger, `http://www.math.rutgers.edu/ zeilberg/mamarim/mamarimhtml/invmaj.html`.

c. (ii) Five Other Publications

1. (With G. Almkvist) *The method of differentiating under the integral sign*, J. Symbolic Computation **10**, 571-591 (1990).

2. *The method of creative telescoping*, J. Symbolic Computation **11**, 195-204 (1991).

3. *Proof of the alternating sign matrix conjecture*, Elect. J. Combinatorics **3(2)** [Foata Festschrift] R13 (1996).

4. (With D. Bressoud) *A proof of Andrews' q-Dyson conjecture*, Discrete Math. **54**, 201-224 (1985).

5. (With H.S. Wilf) *An algorithmic proof theory for hypergeometric (ordinary and "q") multisum/integral identities*, Invent. Math. **108**, 575-633 (1992).

d. Synergetic Activities

The *Wilf-Zeilberger Algorithmic Proof Theory* is widely used by mathematicians and scientists alike, and has been implemented in all major computer algebra systems. The National Institute of Standards and Technology 'wired' the classic handbook of mathematical functions (the most widely cited book in science), by using WZ theory as its driving force.

My many Maple packages, in addition to doing the specific tasks that they were designed to do, when taken together, constitute a whole 'research methodology' for doing computer-assisted and computer-generated research. They are all **freely available**. Also my numerous lecture notes for undergraduate courses are freely available (from my homepage), and are used by students all over the world.

I am member of the Advisory board of the On-Line Encyclopedia of Integer Sequences. See: `http://oeisf.org/advisors.txt`.

I am member of editorial board of seven journals, see: `http://www.math.rutgers.edu/~zeilberg/journals.html`. Many of my lectures are available on the internet. The links are available from my homepage.

e. Collaborators and Advisor

e(i). Recent Collaborators

Shalosh B. Ekhad (Rutgers), Edinah Gnang (Inst. for Advanced Study), Andrew Baxter, Brian Nakamura, Andrew Sills.

e(ii). Graduate Advisor

Harry Dym (Weizmann Institute).

e(iii). Thesis Advisor
So far, 22 students received their Ph.D. degree under by supervision.
See `http://genealogy.math.ndsu.nodak.edu/id.php?id=19205` and
`http://www.math.rutgers.edu/~zeilberg/banim.html` .