

Geoffrey Charles Fox

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Citizen Status: Permanent Resident Alien; Citizen of United Kingdom
(Application for U.S. Citizenship pending)

Education:

B.A. in Mathematics from Cambridge Univ., Cambridge, England (1961-1964)
Ph.D. in Theoretical Physics from Cambridge University (1964-1967)
M.A. from Cambridge University (1968)

Professional Experience:

1990- Professor of Computer Science, Syracuse University
1990- Professor of Physics, Syracuse University
1990- Director of Northeast Parallel Architectures Center
1979-1990 Professor of Physics, California Inst. of Tech.
1986-1988 Associate Provost for Computing, California Inst. of Tech.
1983-1985 Dean for Educational Computing, California Inst. of Tech.
1981-1983 Executive Officer of Physics, California Inst. of Tech.
1974-1979 Associate Professor of Physics, California Inst. of Tech.
1971-1974 Assistant Professor of Physics, California Inst. of Tech.
1970-1971 Millikan Research Fellow in Theoretical Physics, Caltech
1970 Visiting Scientist (April-May), Brookhaven National Laboratory
1969-1970 Research Fellow at Peterhouse College, Cavendish Lab., Cambridge
1968-1969 Research Scientist, Lawrence Berkeley Lab., Berkeley, Calif.
1967-1968 Member of School of Natural Science, Inst. for Advanced Study,
Princeton, New Jersey

Awards and Honors

Senior Wrangler, Part III Mathematics, Cambridge (1964)
Alfred P. Sloan Foundation Fellowship (1973-75)
Fellow of the American Physical Society (1990)

Journal Editor: Concurrency: Practice and Experience (John Wiley, Inc.)

Selected List of Publications - 5 general ones preceded by 5 specific to proposal

pps 111-118, Winter 1992. C3P-958, CRPC-TR91123.

4. Fox G.C., Furmanski W., "Computing on the Web, New Approaches to Parallel Processing, Petaop and Exaop Performance in the Year 2007 IEEE Internet Computing 1:2,38-46, 1997
5. Fox G.C., and Podgorny M, "Real Time Training and Integration of Simulation and Planning using the Tango Interactive Collaborative System", in Proceedings of International Test and Evaluation Workshop on High performance Computing, July 1998, Aberdeen Maryland.
6. Fox, G.C., Akarsu E., Furmanski W., Haupt T., "WebFlow -- High-level Programming environment and Visual Authoring Toolkit for High Performance Distributed Computing" in Proceedings of SC98, Orlando, November 1998.
7. Fox, G.C., Johnson, M.A., Lyzenga, G.A., Otto, S.W., Salmon, J.K., Walker, D.W., Solving Problems on Concurrent Processors, Vol. 1, Prentice-Hall, Inc. 1988; Vol. 2, 1990.
8. Fox, G. C., Messina, P., Williams, R., Parallel Computing Works!, Morgan Kaufmann, San Mateo Ca, 1994.
9. Fox, G. C. "Approaches to Physical Optimization," in Proceedings of 5th SIAM Conference on Parallel Processes for Scientific Computation, pp 153-162, March 25-27, 1991, Houston, TX, J. Dongarra, K. Kennedy, P. Messina, D. Sorensen, R. Voigt, editors, SIAM, 1992.
C3P-959, CRPC-TR91124
- 10 Fox, G, Bozkus, Z., Choudhary, A., Haupt, T., and Ranka, S. "A compilation approach for Fortran 90D/HPF compilers on distributed memory MIMD computers," in Proceedings of the Sixth Annual Workshop on Languages and Compilers for Parallel Computing. Lecture Notes in Computer Science, Springer-Verlag, pp. 200--215. U. Banerjee, D. Gelernter, A. Nicolau, and D. Padua (editors).

Summary of Interests

See: <http://www.npac.syr.edu/DC>

Java based Computation: <http://www.npac.syr.edu/projects/javaforcse>

For education: <http://www.webwisdom.org>

Fox has worked in a variety of applied computer science fields with his work on computational physics evolving into well known contributions to parallel computing initially involving the hypercube architecture. Over the last three years, his major activity has been the use of Object Web technologies to build collaboration systems and their

available on the Web and his research includes HPCC technology to support education at both K-12 and University level. His research on parallel computing has focused on development and use of this technology to solve large-scale computational problems -- such as numerical relativity and earthquake prediction. Fox directs InfoMall, which is focused on accelerating the introduction of high speed communications and parallel computing into New York State industry and developing the corresponding software and systems industry.