Geoffrey Charles Fox

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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:

2000-	Professor of Computer Science, Florida State University
2000-	Associate Director of School for Computational Science and Information Technology -- Director of Computational Science and Information Laboratory
2000-	Chief Technologist of Office of Distributed and Distance Learning, FSU
2000-	Distinguished Visiting Scientist, JPL
1990-	Professor of Computer Science, Syracuse University
1990-	Professor of Physics, Syracuse University
1990-2000	Director of Northeast Parallel Architectures Center, Syracuse University
1989-	Visiting Professor in Computer Science, Rice University
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, Brookhaven National Laboratory, Long Island
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.)

Industry Experience
Co-founder of WebWisdom.com and Anabas corporations.
Patents TangoInteractive Collaboration System, March 2000 with several members of WebWisdom.com

Selected List of Publications

1) Bryan Carpenter, Vladimir Getov, Glen Judd, Anthony Skjellum and Geoffrey Fox, ``MPJ: MPI-like message passing for Java'', Concurrency: Practice and Experience}, Vol 12, num 11 (2000).
2) Guansong Zhang, Bryan Carpenter and Geoffrey Fox and Xinying Li and Yuhong Wen, ``The HPspmd Model and its Java Binding.'', chapter in book, R. Buyya ed, (High Performance Cluster Computing, Vol 2}, Prentice Hall 1999.
3) Fox, G.C. "Portals and Frameworks for Web Based Education and Computational Science", Proceedings of the Second International Conference on the Practical Application of Java, Editor Omer Rana, Manchester England April 12-14 2000, http://www.new-npac.org/users/fox/documents/pajavaapril00/
4) Erol Akarsu, Geoffrey Fox, Tomasz Haupt, Alexey, Kalinichenko, Kang-Seok Kim, Praveen Sheethaalnath, and Choon-Han Youn, Using Gateway System to Provide a Desktop Access to High Performance Computational Resources, Proceedings of HPDC-8 Conference, Redondo Beach Ca., Aug 3-6, 1999, IEEE Press.
5) Fox, G.C., Ken Hurst, Andrea Donnellan, and Jay Parker, "Introducing a New Paradigm for Computational Earth Science – A web-object-based approach to Earthquake Simulations", a *chapter in AGU monograph* on "GeoComplexity and the Physics of Earthquakes" edited by John Rundle, Donald Turcotte and William Klein and published by AGU in 2000, pp 219-245. http://www.new-npac.org/users/fox/documents/gempapermarch00
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, 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).
8) Fox, G. C., Messina, P., Williams, R., Parallel Computing Works!, Morgan Kaufmann, San Mateo Ca, 1994.
9) Fox, G. C. "Parallel Computing and Education," Daedalus, Journal of the American Academy of Arts and Sciences, Vol. 121, No. 1, pps 111-118, Winter 1992.
10) 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.

Synergistic Activities

The work on the Java Grande Forum (set up and coordinated by Fox) is addressing broadly issues on achieving high performance in Java and underpins much of this proposal. Further the working group on User Environments for the Grid Forum (where Fox co-chairs) addresses the new types of Java and distributed object middleware envisaged in this proposal. Another important Grid Forum activity is the Jini effort in which we participate. Our recent work on new computing environments for Earthquake science (ref. 5) above) provides application motivation as does our participation in the DoD PET program which funds the Gateway portal activity Refs 3) to 6)).

Collaborators

Bernholdt David, Oak Ridge; Bogucz, Ed, Syracuse University; Bender, Charlie, OSC; Brown Willie, Jackson State University; Browne, Jim, University of Texas; Dennis, Larry, FSU; Dennis, John, Rice University; Dongarra, Jack,University of Tennessee; Foster, Ian, Argonne National Laboratory; Gannon, Dennis, Indiana University; Giles, Roscoe, Boston University; Gilman, Al, (private consultant); Hariri, Salim, University of Arizona; Kennedy, Ken, Rice; Meiron, Dan, Caltech; Messina, Paul, Caltech; Reed, Dan, UIUC; Thompson, Joe, Mississippi State University; von Laszewski, Gregor, Argonne; Wheeler, Mary, Texas; White, Andy, Los Alamos
Thesis Advisor: Eden, Richard, Cambridge University