Robert L. (Bob) Eberlein

Bob has been teaching, consulting, and developing tools for System Dynamics for over thirty years. His involvement with the field began at MIT, where he worked under Jay Forrester on the National Model project. He developed the Vensim software, bringing it from an internal project to a usable and broadly used commercial application. He has been active in the System Dynamics Society since shortly after it was founded chairing three of the annual conferences holding several offices including President in 2004. He joined isee systems in 2013 where he has guided the evolution of Stella into a robust and modern platform.

2013- **isee systems, inc.** **Co-President**

Leads technology development and co-chairs the consulting practice at isee systems, the world leader in tools for systems thinking. The company is striving to bring the value of System Dynamics to a broad audience, including K-12, university, research and business by making the tools to develop great models and insights as powerful and easy to use as possible.

2011-2012 Duke-NUS Graduate Medical School Adjunct Assistant Professor

Conducted research in population health modeling for Singapore with a focus on chronic disease progression in an aging population. Developed a number of tools to help modeling at the population level while also representing the impact of multiple diseases in order to look at likely future morbidity and mortality scenarios.

1988-2010 Ventana Systems, Inc. *Senior Consultant and Head of Product Development*

Ventana is a small consulting company offering organizations strategic and operational support through the use of dynamic simulation models and intensive data analysis. Bob worked on engagements with a variety of organizations including the military, NGOs and large corporations in a variety of business segments. The problems being addressed included issues in project management, electricity generation and distributions, aircraft fleet maintenance, pharmaceutical launch strategies, manufacturing throughput, supply chain management, economic development, strategic alliance formation, computer maintenance and telecommunications product rollout.

Organized and ran several multi-day workshops each year teaching System Dynamics and software use. These included both introductory and advanced topic sessions. Ran a large number of shorter presentations designed as introductions to the methodology of System Dynamics.

Responsible for the development, marketing, maintenance and support of Vensim, which is a widely used desktop software product supporting the building and analysis of simulation models

Delivered customized software solutions for aircraft sparing, perishables management and price index computation for engagements in which an operational implementation was required.

Experience continued

2004-2013 Worcester Polytechnic Institute Adjunct Assistant Professor

Teaches a graduate course titled *Model Analysis and Evaluation Techniques* as part of the distance program in System Dynamics.

1986- System Dynamics Society Vice President Electronic Presence

The System Dynamics Society is a not for profit. Bob Served as Secretary, Vice President: Meetings, President and, currently, Vice President: Electronic Presence as well as Program Chair for the 2003 Conference and Co-Chair for the 2013 and 2018 conference. Develops and maintain the Society's Web Portal used for conference and member management. This is all volunteer work.

1987-1988 Shanghai Institute of Mechanical Engineering Visiting Assistant Professor

Taught System Dynamics and Western Economic Theory to a graduate class of Chinese students in an English Language MBA Program.

1985-1987 Pugh-Roberts Associates, Inc. Management Consultant

Built and analyzed simulation models for corporate strategy, presenting results to clients. Developed software for tuning models to historical data and analyzing model-generated dynamics.

1984-1985 University of Alberta Visiting Assistant Professor of Economics

Taught undergraduate courses in Introductory Microeconomics and Intermediate Macroeconomics as well as a graduate level course in Computer Applications in Economics using APL. Researched the application of linear analysis tools to nonlinear models, and the implications of statistical model mispecification on resulting parameter estimates.

Education

Ph.D. Massachusetts Institute of Technology (1984), Sloan School of Management. Concentration in Applied Economics and System Dynamics. Conducted research on the National Model Project under Professor Jay W. Forrester.

McGill University, mathematics and physics (1981).

B.A. University of British Columbia (1980), Economics, magna cum laude.

Publications

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Robert L. Eberlein and James H. Hines (1996). "Molecules for Modelers," *Proceedings of the 14th International Conference of the System Dynamics Society*, Cambridge, Massachusetts, USA.

Gerald. O. Barney, Robert Eberlein, Weishuang Qu and P.D. Sharma (1995) "The Threshold 21 Sustainable Development Model," *Proceedings of the 13th International Conference of the System Dynamics Society*, Tokyo, Japan.

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