CURRICULUM VITÆ
MICHAEL L. BEST

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EDUCATION

- **Massachusetts Institute of Technology**
  6/96 - 3/00
  Ph.D. Degree - Media Laboratory
  - Research Assistant, Software Agents and Machine Understanding Groups.
  - Primary research activities: social agents, information agents, text analysis, evolution in natural language, language change, analysis of Internet communities, technologies for social and economic development.
  - Thesis advisor: Prof. Pattie Maes. Thesis title: Microevolutionary Language Theory

- **Massachusetts Institute of Technology**
  9/94 - 6/96
  Master of Science Degree - Media Laboratory
  - Thesis title: An Ecology of the Net: Message Morphology and Evolution in NetNews
  - Cumulative GPA: 4.0/4.0

- **University of California, Los Angeles**
  10/84 - 6/89
  Bachelor of Science Degree - Computer Science and Engineering
  Course work includes: Software Engineering, Programming Languages, Data Structures, Operating Systems, Computer System Architecture, On-Line Systems, Computational Theory, Artificial Intelligence, Natural Language Processing.

WORK EXPERIENCE

- **Research Scientist, MIT Media Laboratory**
  3/00 - Present
  - A research faculty position.
  - Responsibilities include advising students, teaching classes, developing and sustaining sponsor relationships, and conducting original research.
  - Primary research in technologies and policies for international social and economic development, in particular Internet and Internet-enabled systems. Ongoing research in microevolutionary models of human natural language.
  - Head of eDevelopment group (http://edevelopment.media.mit.edu).

- **Director, Media Lab Asia**
  9/01 - 9/02
  - Research work exploring new communication and system software technologies, wireless networks, e-commerce environments, and new business models and policy work on rural Internet.
  - Considerable start-up responsibilities including developing institutional relationships, fund raising, and strategic planning.
  - Principal Investigator on US$2 million per anum worth of research activity. Considerable work in hiring and managing research teams.

- **Visiting Research Fellow, Center for International Development, Harvard University**
  1/00 - 6/02
  Conduct policy, strategy, and technical research in information and communication technologies for social and economic development.

- **Research Engineer, Open Software Foundation Research Institute**
  9/96 - 9/97
  Architect and implement kernel PC sampling for new object oriented micro-kernel operating system.

- **Software Engineer, Thinking Machines Corporation**
  6/92 - 6/94
  - Chief architect of node-based IO and Unix services for the CM-5 supercomputer message passing library. Considerable work on optimal routes for co-operative I/O operations.
  - Architecture and simulation of future filesystem, I/O, and network designs.
  - Research on parallel I/O workloads.
  - Port of large commercial relational database and development of distributed lock manager.

- **Applications Engineer, Thinking Machines Corporation**
  8/89 - 6/92
  - Development within compiler group of C* communication runtime library.
  - Principal support engineer for C*, Connection Machine data parallel C language.

- **Principal Programmer, Office of Computer and Communication Resources, The California State University**
  6/86 - 9/87
  - Design and implement a major communications package on DOS based platform; system responsible for administration, reporting, and security of digital port selectors at all campuses of the California State University.
  - Supervise installation and integration of system on a variety of networks throughout California.

- **Congressional Intern, US House of Representatives**
  Summer 1984
  Primary responsibilities were constituent letters, case work, and legislative research.

SELECTED PROFESSIONAL ACTIVITIES

- **Co-Founder and EDITOR-IN-CHIEF**
  Information Technologies and International Development
  Published by the MIT Press
- **ICT Policy Consultant**
  The World Bank
  Consultant on national ICT policies in Thailand and Ghana.
- **Faculty Council**
  MIT Program on Human Rights and Justice
- **Steering Committee**
  Digital Opportunities Task Force Non-profit Organizations (DOT Force NPO)
- **Managing Editor and Editorial Board**
  Journal of Memetics – Evolutionary Models of Information Transmission
- **Program Committee Member and Conference Co-Chair**
  Member of the Program Committee for a number of international conferences. Conference Co-Chair for programs in Cambridge, MA (eDevelopment Symposium, 2000) and India.
- **External Reviewer**
  External reviewer for a number of journals including *Proceedings of the Royal Society of London.*
- **Visiting Scholar**
  European Media Laboratory, Heidelberg Germany
  6/97 - 12/97
- **Summer Student**
  Santa Fe Institute, Complex Systems Summer School, 1995

JOURNAL ARTICLES

M.L. Best. Wither Wireless Networks for Rural Development. To appear *Rural Development Dialogue*.

M.L. Best. Adaptive Value Within Natural Language Discourse. To appear *Evolution of Communication Journal*.

H. Shakeel, B. Miller, S. Weber & M.L Best. Comparing Urban and Rural Telecenters Costs. *Electronic Journal on Information Systems in Developing Countries*, vol 4, 2001.

M.L. Best. Towards Computational Memetics. *Journal of Memetics,4*(2), 2001.

M.L. Best. How culture can guide evolution: An inquiry into gene/meme enhancement and opposition. *Journal of Adaptive Behavior, 7*(3), 281-298, 1999.

M.L. Best & R. Pocklington. Meaning as use: Transmission fidelity and evolution in NetNews. *Journal of Theoretical Biology, 196*(3), 389-395, 1999.

M.L. Best. Memes on memes: A critique of memetic models. *Journal of Memetics,* 2(1), 1998.

M.L. Best. Corporal ecologies and population fitness on the net. *Journal of Artificial Life,* 3(4), 1998.

M.L. Best. Models for interacting populations of memes. *Journal of Memetics*, 1(2), 1997.

R. Pocklington & M.L. Best. Cultural evolution and units of selection in replicating text. *Journal of Theoretical Biology,* 188(1), 1997.

N. Nieuwejaar, D. Kotz, A. Purakayastha, C.S. Ellis & M.L. Best. File-access characteristics of parallel scientific workloads. *IEEE Transactions on Parallel and Distributed Processing*, 7(10), 1996.

BOOK CHAPTER

M.L. Best & C.M. Maclay. Community Internet Access in Rural Areas: Solving the Economic Sustainability Puzzle. *The Global Information Technology Report 2001-2002: Readiness for the Networked World.* Oxford University Press. 2002.

POPULAR PRESS

M.L. Best, A. Jhunjhunwala & C.M. Maclay, Link up rural India. *The Economic Times*, April 4, 2001.

SELECTED CONFERENCE PAPERS

H. Shakeel & M.L. Best. Community Knowledge Sharing: An Internet Application to Support Communications Across Literacy Levels. In J.R. Herkert (Ed.), *Social Implications of Information and Communication Technology* (pp. 37-44). New York, NY: IEEE Press. 2002.

M.L. Best, L. Burnes, M. Escobedo & H. Shakeel. Village Area Network, Bohechio. In S. Krishna & S. Madon (Eds.), *Proceedings of the Seventh International Working Conference of IFIP WG 9.4* (p. 211-220). Bangalore, India. 2002.

M.L. Best. Coevolving mutualists guide simulated evolution. In M.A. Bedau, J.S. McCaskill, N.H. Packard & S. Rasmussen (Eds.), *Artificial Life VII: Proceedings of the Seventh International Conference.* Cambridge, MA: MIT Press. 2000.

M.U. Bers & M.L. Best. Rural connected communities: A project in online collaborative journalism. In C Hoadley & J. Roschelle (Eds.), *Computer Support for Collaborative Learning (CSCL'99)* (pp. 41-47). 1999.

M.L. Best. Coevolving mutualists guide simulated evolution. In W. Banzhaf, J. Daida, A.E. Eiben, M.H. Garzon, V. Honavar, M. Jakiela & R.E. Smith (Eds.) *Proceedings of the Genetic and Evolutionary Computation Conference* (p. 941). San Francisco, CA: Morgan Kaufmann Publishers. 1999.

M.L. Best. Memes and genetic opposition. In *Proceedings of the 15th International Congress on Cybernetics (Association Internat. de Cybernetique, Namur)*, 1998.

M.L. Best. Models for interacting populations of memes: Competition and niche behavior. In *Proceedings of the Fourth European Conference on Artificial Life,* 1997.

M. L. Best. CHARISMA: A smart look at parallel file access patterns. In *Proceedings of the Fifth Annual MIT Student Workshop on Scalable Computing*, 1995.

A. Purakayastha, C. Ellis, D. Kotz, N. Nieuwejaar & M.L. Best. Characterizing parallel file-access patterns on a large-scale multiprocessor. In *Proceedings of the Ninth International Parallel Processing Symposium*, 1995.

M.L. Best, A. Greenberg, C. Stanfill & L.W. Tucker. CMMD I/O: A parallel Unix I/O. In *IEEE Seventh International Parallel Processing Symposium,* 1993.

PATENT

J.L. Frankel, M.L. Best, *et al. System for compiling parallel communications instructions including their embedded data transfer information.* United States Patent Number 5,335,491, 1994.