curriculum vitae

Duane Steward, D.V.M., M.S.I.E., Fellow, Am. Acad. Vet. Informatics.

Clinical Decision Making Group Laboratory for Computer Science Office Telephone: (617) 253-3533 Home Telephone: (781) 643-7063

NE43-415

545 Technology Square

Cambridge, Massachusetts 02174

"duane@mit.edu" or "meshack@aol.com"

Personal

Married 23 years, 16 year old son, 13 year old son 43 years old Excellent health 6'1" 165 pounds

Education

Laboratory for Computer Science, Massachusett Institute of Technology, Cambridge, Ma.; Ph.D. (anticipated) Aug. 1998

Fellowship at Clinical Decision Making Group, Harvard-MIT Division of Health Science and Technology (HST), Cambridge, Ma. and Division of Clinical Decision Making, Informatics and Telemedicine, New England Medical Center, Boston, Ma.

Coll of Eng., Fla State Univ, Tallahassee, Fl.; M.S.I.E. Dec. 1994; Computer Science minor Coll of Vet Med, University of Fla., Gainesville, Fl.; D.V.M. 1980 Florida State University, Tallahassee, Fl; B.S. 1976 Biology Major

Professional Appointments

Program Committee Chair for Talbot Symposium on Veterinary Informatics at the American Veterinary Medical Association Annual Convention, Baltimore, Md. 1998

American Academy of Veterinary Informatics (Charter Fellow, Advisory Board) 1993

American Association of Housecall Veterinarians (Founding Board Member) 1990-1994

Chaired Session at Delta Society Conference at Eastern States Veterinary Conference: "Pets Helping People" 1988

Co-Chairman Fla. Vet. Med. Assoc. Committee on the Human-animal bond 1988

Research

current fellow of Clinical Decision Making Group of the Massachusetts Institute of Technology Laboratory for Computer Science. Funded by National Library of Medicine's Research Training in Medical Informatics

Dissertation: Utility Assessment Based on Individualized Patient Perspectives (in writing). Master's Thesis: The Application of Simulation to the Design & Operation of Veterinary Practice.

Interests: Patient Preference Modeling and Elicitation; Machine Learning; Simulation; Decision Support Theory and Implementation; Problem definition and problem driven solutions as opposed to technology driven solutions

Areas of Knowledge

Currently developing a patient preference assessment tool implemented in Java and the Java Expert System Shell (JESS) for use on the World Wide Web.

Computer programmer familiar with DOS/Windows and OS2/Warp operating systems and less with Macintosh/Apple. Have written paperless veterinary medical record and practice management application with Enable Integrated Software. Experienced in writing programs in Java, HTML, JESS, Scheme, NewtonScript, PowerScript, MProlog, C, Slamsystem/Slam II, FORTRAN, Pascal, Basic for undergraduate and graduate college coursework (including work on the ETA10 supercomputer and VAX systems at FSU).

Publications

Steward, Duane and Davis, Mark. Qualification of Discordant Responses in Utility Assessment, submitted to AMIA Fall Symposium.

Steward, Duane. Utility Assessment Based on Individualized Patient Perspectives, Proceedings of the Spring Symposium on Interactive and Mixed-Initiative Decision-Theoretic Systems, AAAI, March, 1998.

Steward, Duane. What is Computer-Aided Diagnosis?, in Murtaugh RJ, Ferguson D, Pion P (ed), Seminars In Veterinary Medicine and Surgery (Small Animal), May, 1996.

Steward, Duane. The Clinician Computer, in Murtaugh RJ, Ferguson D, Pion P (ed), Seminars In Veterinary Medicine and Surgery (Small Animal), May, 1996.

Steward, Duane and Standridge, Charles R. The Application of Simulation to Veterinary Practice Management, Journal of the American Veterinary Medical Association, Mar. 15, 1996.

Steward, Duane and Standridge, Charles R. Demonstrations of the use of Simulation in

Veterinary Practice Management, Journal of the American Veterinary Medical Association, Mar. 15, 1996.

Steward, Duane and Standridge, Charles R. A Veterinary Practice Simulator Based on the Integration of Expert System and Process Modeling, Simulation, March, 1996.

Steward, Duane, What is Your Clinic Staff's Computer Skills Inventory?, Veterinary Forum, Sept. (1994).

Steward, Duane, It Can Make A 'Horse of a Difference', Veterinary Forum, Oct. (1993).

Steward, Duane, Information Wars, Veterinary Forum, Sept. (1993).

Steward, Duane, At Home Veterinary Services bimonthly newsletter to clients, Jan. 1984 - June 1994.

Invited Talks

"Confusion in the ED; What is the value of grave outcomes?", New England Medical Center, Division of Clinical Decision Making, Boston, Massachusetts, 2/26/1998.

"Validation of Utility Assessment Methods Without a Gold Standard", Massachusetts Institute of Technology, Clinical Decision-Making Group, Cambridge, Massachusetts, 11/6/1997.

"Presentation of a Prototype for Automated Elicitation of Patient Values - Part II", Massachusetts Institute of Technology, Clinical Decision-Making Group, Cambridge, Massachusetts, 9/25/1997.

"Presentation of a Prototype for Automated Elicitation of Patient Values", Massachusetts Institute of Technology, Clinical Decision-Making Group, Cambridge, Massachusetts, 5/1/1997.

"A Proposed Method for Utility Assessment that Explicitly Includes the Patient Perspective", Center for Outcomes and Policy Research, Harvard School of Public Health, Boston, Massachusetts, 11/19/1996.

"Individualized utility Assessment", New England Medical Center, Division of Clinical Decision Making, Boston, Massachusetts, 11/14/1996.

"Digital Publishing, Expert Systems and Computer-aided Diagnostics", Conference: "Towards a Veterinary Medical Records Model for the 21st Century," Advanced Veterinary Systems, Denver, Colorado, 11/2/96.

"Relationships Between The Constructs Of A Patient's Worldview", Massachusetts Institute of Technology, Clinical Decision-Making Group, Cambridge, Massachusetts, 5/16/1996.

"Patient Desires For Health", Massachusetts Institute of Technology, Clinical Decision-Making Group, Cambridge, Massachusetts, 3/7/1996.

Honors

Recognized for contributions to the Companions For Therapy (ComForT) program (Pet-facilitated therapy) by the District II Long-term Care Ombudsman Council

Memberships

American Medical Informatics Association

American Academy of Veterinary Informatics (Charter Fellw by Appt)

American Veterinary Medical Association

American Association of Housecall Veterinarians (Past Bd member)

American Veterinary Computer Society

Institute of Industrial Engineers

Consultancy

Marchitect, Inc as knowledge engineer enabling implementation of novel ideas for management of marketing information 1997-present

Veterinary Informatics Consultant for Veterinary Information Network February 1991 - present Systems Analysis & Information Technology Consultant to MSPCA Angell Memorial Veterinary Hospital (limited exploration) July 1996

Computer Systems analyst for the computerization of 3 Tallahassee area Veterinary Hospitals February 1991 - July 1994

Beta tester for numerous software developments, including Java Expert System Shell, Roaster Java Development for the Mac, PowerBuilder for the Mac, Decision Maker, Enable Intedgrated Software ComForT program of Tallahassee as Veterinarian, literature reviewer, animal behaviorist and systems analyst. (Founding Committee member) 1983 - 1993

Systems Analyst for Warmack Brick Supply utilization of SLAM II simulation language and other software to effectively launch a new brick building-supply company December 1990 - March 1991

Licensure

Licensed to practice Veterinary Medicine in the Florida and Massachusetts USDA Accredited Veterinarian in the State of Florida

References

John Nugent, Group Vice President, East General Business & Alliances, Oracle Corporation, Bay Colony Corporate Center, 1000 Winter St., Suite 2200, Waltham, MA, 02154

Peter Szolovits, PhD, Director, Clinical Decision Making Group, Laboratory for Computer Science, M.I.T., Cambridge, MA 02139

Alan W. Hahn, DVM, PhD, ACVIM(Cardiology), 333 Clydesdale Hall, University of Missouri, Columbia, MO 65211

Donald Abt, VMD, Director, AquaVet, Marine Biological Laboratory, 7 MBL Street, Woods Hole, MA 02543-1015

Paul Friesen, Pastor of Home and Family, Grace Chapel, 3 Militia Drive, Lexington, MA 02173