New Membership Directory

At this summer’s conference in Boston, Jon Doyle, chair of the Association of Computing Machinery (ACM)’s SIGART, approached Danny Bobrow and myself about creating a joint membership directory. Viewing this joint directory as a great idea, we approached Peter Patel-Schneider, Secretary of Canadian Studies in Artificial Intelligence (CSCLI), about including CSCLI members. Peter tentatively agreed, contingent on his board’s agreeing to the joint effort. It is hoped that we can also include the budding Mexican AI society’s members in the directory.

The purpose of the directory is not only to provide a listing of the names of all these societies’ members but also to serve as a general information resource about North American AI research centers, AI companies, and universities and colleges with AI studies. If your company, university or college, or research center was not represented in last year’s AAAI directory, please send address, telephone, and contact information to me at AAAI, and I’ll make sure it is included.

Since the summer meeting, we have begun discussions on the content, format, and production schedule for the directory. We are hoping to develop this directory for release in mid-July 1991, with AAAI managing the production.

Since you will not receive your regular directory in February, we changed the date by which you need to submit address changes. It is now 1 March 1991.

I hope you will find the new directory a worthwhile service. Your comments on this project or any other issue are welcomed.

—Claudia Mazzetti
Executive Director
csnet: mazzetti@aaai.org

Planning in Uncertain, Unpredictable, or Changing Environments

The following Spring Symposium summary was inadvertently left out of the Fall AI Magazine. We include it here, with apologies to the author.—Ed.

This symposium focused on the practical and theoretical issues involved for AI planning systems in domains in which it is difficult to maintain a consistent world model due to uncertainty, unpredictability, or rapid environmental change. Much of the early research in planning assumed that the planner possessed complete knowledge of the current state of the world and the cause-and-effect relationships that governed change in that world. This assumption gave rise to a model of planning in which a sequence of atomic actions was generated by a planning component and subsequently executed by a separate execution component. Clearly this approach was in need of revision in situations where separate execution cannot be guaranteed to succeed. A number of alternatives and refinements have now been suggested. Some examples include: interleaved or concurrent planning and execution, planners that schedule planning and control procedures, and planners that learn strategies for dealing with uncertainty and time-critical situations.

This symposium brought together researchers representing three main approaches to the area of dealing with dynamic domains. The first area involved research into models which could more appropriately deal with issues involving reasoning about execution time events and improving the planning paradigm to deal with the control of inferencing and actions under time (and other resource) limitations. A second area of interest was that of using machine learning to allow a system to improve its behavior by learning the characteristics of the domain in which it is executing. The final area concerned the development of so-called “reactive planning systems,” those in which execution time events could trigger rapid reactions in the system, and yet which, over time, would converge on goal directed behavior.

The symposium consisted of three talks, one on each of these major areas, followed by a set of panels and short presentations. The invited speakers included Nils Nilsson, Stanford University, speaking on “teleo-reactive systems,” Peter Ramadge, Princeton University, speaking on non-linear, dynamic control systems, and Tom Mitchell, Carnegie Mellon University, speaking on the integration of explanation-based learning and planning. The working notes of this symposium are being released as a University of Maryland, Systems Research Center, Technical Report. Those interested in obtaining a copy should contact the program chair (hendler@cs.umd.edu).

—James Hendler

Fellows of the American Association for Artificial Intelligence

Artificial Intelligence is as old as computer science itself, and has changed during the last 40 years from the vision of a few pioneers to a professional field with many active research areas and widespread industrial applications. There has as yet been no way of publicly recognizing outstanding achievement in the field.

Recognizing this lack, the American Association for Artificial Intelligence, the largest AI society, has started a Fellows program, by which a limited number of AAAI members of appropriate standing and seniority will be selected each year to lifetime Fellow status. It is expected that there will be between two and three hundred Fellows once the program is mature, from the total of approximately thirteen thousand AAAI mem-
bers worldwide. The first group of 74 Fellows includes many of the founders of the field. Although these people have received various awards, this is the first time that their professional colleagues have formally recognised their achievement.

Fellows are considered as having unusual distinction in the profession. A Fellow may be recognized by individual technical contributions, from having performed extended service to AAAI or the AI profession generally, or from total years in the profession. Evidence of technical contribution may be in the form of publications, but other evidence can also be considered, such as patent awards or statements of longstanding contribution to an industrial group efforts.

The award of the status of AAAI Fellow carries no financial reward, and is taken to incur a certain responsibility to help maintain — perhaps even improve — the standards of the AI field.

The first Fellows dinner was held on Wednesday, August 1, 1990, at the Eighth National Conference in Boston. There will be a Fellows dinner at each subsequent National Conference to formally welcome new Fellows.

Fellows will be selected from the nominations each year by a Fellows committee, usually chaired by the Past President of AAAI. The operation of this committee will be under the review of the AAAI Council, and we plan to take considerable care in making an open process while ensuring the confidentiality of its actual decision process. Since the members of the Fellows committee must be Fellows, the first group of Fellows was chosen by a special election from a list of nominations put forward by the membership. Details of this election process can be supplied by the AAAI office.

— Patrick Hayes
Chair, Fellows Committee 1989-90

1990 AAAI Fellows
James Allen, Rochester University
Saul Amarel, Rutgers University
Ruzena Bajcsy, University of Pennsylvania
Hans Berliner, Carnegie Mellon University
Wolfgang Bibel, Technische Hochschule Darmstadt
Woodrow Bledsoe, University of Texas at Austin
Daniel G. Bobrow, Xerox Palo Alto Research Center
Ronald J. Brachman, AT&T Bell Laboratories
J. Michael Brady, Oxford University
Rodney Brooks, Massachusetts Institute of Technology
John Seely Brown, Xerox Palo Alto Research Center
Bruce Buchanan, University of Pittsburgh
Alan Bundy, University of Edinburgh
Eugene Charniak, Brown University
Alan Collins, Bolt Beranek & Newman
Randall Davis, Massachusetts Institute of Technology
Johan de Kleer, Xerox Palo Alto Research Center
Richard Duda, San Jose State University
Edward Feigenbaum, Stanford University
Jerome Feldman, International Computer Science Institute
Richard Fikes, Price Waterhouse Corporation
Michael Genesereth, Stanford University
Barbara Grosz, Harvard University
Peter Hart, Syntelligence Corporation
Patrick J. Hayes, Xerox Palo Alto Research Center
Geoffrey Hinton, University of Toronto
Bernhold K. P. Horn, Massachusetts Institute of Technology
Aravind Joshi, University of Pennsylvania
Robert Kanade, Carnegie Mellon University
Takeshi Kamide, Carnegie Mellon University
Casimir Kulikowski, Rutgers University
Douglas Lenat, Microworlds and Computer Consortium
Victor Lesser, University of Massachusetts at Amherst
Hector Levesque, University of Toronto
Tomas Lozano-Perez, Massachusetts Institute of Technology
John McCarthy, Stanford University
Drew McDermott, Yale University
John McDermott, Digital Equipment Corporation
Alan Mackworth, University of British Columbia
Donald Michie, Turing Institute
Jack Minker, University of Maryland
Marvin Minsky, Massachusetts Institute of Technology
Tom Mitchell, Carnegie Mellon University
Ali Newell, Carnegie Mellon University
Nils Nilsson, Stanford University
Judea Pearl, University of California at Los Angeles
C. Raymond Perras, SRI International
Tommaso Poggio, Massachusetts Institute of Technology
Robin Popplestone, University of Massachusetts at Amherst
J. Ross Quinlan, University of Sydney
Marc Ratliff, Massachusetts Institute of Technology
D. Raj Reddy, Carnegie Mellon University
Raymond Reiter, University of Toronto
Alan Robinson, Syracuse University
Charles Rosen
Azriel Rosenfeld, University of Maryland
Stanley Rosenschein, Teleos Research Corporation
David Rumelhart, Stanford University
Arthur Samuels, posthumously
Erik Sandewall, University of Linköping
Roger Schank, Northwestern University
Edward Shortliffe, Stanford University
Herbert Simon, Carnegie Mellon University
James R. Slagle, University of Minnesota
Guy Steece, Thinking Machines Corporation
Mark Stefl, Xerox Palo Alto Research Center
Gerald Sussman, Massachusetts Institute of Technology
Jay M. Tenenbaum, Stanford University
Donald Walker, Bellcore
David Waltz, Thinking Machines Corporation
Bonnie Lynn Webber, University of Pennsylvania
Patrick Winston, Massachusetts Institute of Technology
Andrew Witten, Carnegie Mellon University
William Woods, Harvard University

Executive Council Meeting Minutes

Date and Location: Monday, 30 July 1990, Hynes Convention Center, Room 300


Daniel Bobrow, AAAI president, introduced the newly elected councilors—Tom Dietterich, Mark Fox, Barbara Hayes-Roth, and Richard Fikes. He then began the formal part of the meeting with the standing committee reports.

Standing Committee Reports

Bruce Buchanan, Treasurer and Chair of the Finance Committee, noted that this year the AAAI fund balance will increase by approximately $400,000. He then introduced a resolution that allows the committee chairs to review all pertinent budgets, with the subsequent chairs incurring any surplus or deficit from the previous chairs’ committee budgets. This policy was amended so that any projected surplus or deficit would be approved with the advice and consent...
of the finance committee. It was also introduced that one-half the membership dues be allocated to cover the magazine costs. The recommendation was tabled until an analysis of the financial implications could be made.

The Publication Chair, William J. Clancey, reported on the status of AAAI Press. Currently, there are three new books for release in spring 1991. The council then discussed changes to the magazine. These ideas were collected and will be submitted to the new editor-in-chief when this person has been selected. Clancey also noted that his job as chair would be ending in 1991.

Howard Shrobe, Conference Committee Chair, discussed the results of the Innovative Applications of Artificial Intelligence Conference. He then introduced Bill Swartout as the proposed Conference Committee Co-Chair; the council unanimously approved his election as conference co-chair. Shrobe then began an extensive discussion about the proposed new strategic plan for the national conference. Further discussions about the implementation of the plan were held during the conference committee meeting the following morning (31 July).

Peter Patel-Schneider, Spring Symposium Chair, reported on his plans for the 1991 symposium. He wants to reduce the number of attendees at each symposium but still try to keep the program self-supporting.

Kathy McKeown, Workshop Chair, noted that this year the number of workshop requests was much lower than in previous years. The Council voted to continue supporting the workshop grant program. Barbara Hayes-Roth, Scholarship Chair, was unable to attend the meeting, so Claudia Mazzetti gave her report. She noted that the number of travel grant applicants had greatly increased, so the Council unanimously voted to increase the grant allocation from $25,000 to $40,000, with the understanding that all student travel recipients will work as volunteers at the conference. The council also unanimously voted to continue funding the Women and Minority grants into 1991.

Pat Hayes, Interim Chair of the Fellows Committee, described the startup procedures and discussed other issues.

**Old Business**

**Computer Research Board (CRB):**
The Council unanimously agreed to fund CRB for three years at $25,000 each year (afterwards it was negotiated down to $1 per member for a period of 5 years. Raj Reddy will negotiate AAAI representation with the CRB).

**Computer Museum Grant:** The Council unanimously agreed to fund the traveling exhibit about AI for $10,000.

**Corporation for National Research Initiative:** No funding was approved at this time for project Mercury; the Council expressed support for maintaining the connection to Project Mercury, and helping to increase the set of machine readable files on AI subjects. The Project Mercury mail-based bibliography retrieval service will remain available to AAAI members.

**Software Archival Library:** Ken Forbus said that he intends to use the Free Software Foundation's licensing agreement for our library. AAAI's attorney will review it in the fall. He also said that he expects to establish a board of individuals from different areas to identify key software to be included in the library.

**Books for Third World Countries Project:** Geoffrey Hinton introduced an alternative to the original proposal. The new proposal is to send a series of books to libraries in Eastern European countries. He volunteered to work with the AAAI office to organize such an effort.

**New Business**

**Membership Survey:** Claudia Mazzetti reviewed the content of the survey and noted that the sampled respondents wanted more industrial, practical involvement in AAAI programs and services. The AAAI Strategic Planning Committee will be reactivated to look into finding a balanced mix of fundamental and industrial research interests for AAAI's programs and services.

**Chapters of the AAAI:** Pat Hayes reported on requests from local groups to establish themselves as AAAI local chapters. After some discussion on this matter, the council decided to see in what ways AAAI could work with ACM's Sigart organization to develop joint local chapters.

### 1991 Computer Bowl

Boston's Computer Museum, sponsor of the Computer Bowl, requests our assistance in soliciting requests for questions about AI. Questions can include but are not limited to games, history, people, and computers and pop culture. Examples might be: "Who was the computer science department chair at Stanford in 1974? What is AAAI's phone number? Who was the first president of AAAI? What were the names of the astronauts in the movie 2001?"

All submitted questions will be reviewed. The submitters of those questions chosen will have their names noted on the program and will receive a College Bowl T-shirt.

Please send your questions to: Computer Bowl Questions Computer Museum 300 Congress Boston, MA

**Solicitation for Videos About Research Efforts in AI Academic and Industrial Laboratories in the US and Abroad**

As an experiment, the AAAI would like to communicate the different research activities within AI research laboratories in the US and abroad using the video media. This is an opportunity for your lab's research efforts to be conveyed to a larger audience.

We are looking for short, 10 minute tapes which we plan to run in parallel in one large room. Please do not send us videos of a particular research project or taped lectures. We're looking for broad descriptions of different programs and projects within a lab.

If you are interested in submitting such a tape, please send it by March 1, 1991 to: AAAI-90 Videos, 445 Burgess Drive, Menlo Park, CA 94025-3496 with the following basic information:

- Title
- Full names, postal addresses, phone numbers and email addresses of all authors
- Tape Format (e.g. VHS, 3/4" U-matic, NTSC, PAL, SECAM) and its duration in minutes
- One abstract briefly describing the lab's research programs, etc.; and
- Author or institution's permission to copy tape for reviewing purposes

All tapes will be previewed. Only...
February 26, 1990

American Association for Artificial Intelligence

Balance Sheet
December 31, 1989

ASSETS

Current Assets:
Cash – Checking $ 46,290
Cash – Brokerage and money market savings 922,939.
Investments of $5,471,731 less allowance for unrealized losses of $120,017 5,351,714.
Inventory 43,844.
Prepaid Expenses & Advances 35,927.
Prepaid Expenses, Net – Future Events 58,609.
Total Current Assets 6,504,565.

Furniture, Fixtures & Equipment, Net (Note 1-C) 118,161
Deposits 10,580.

LIABILITIES AND FUND BALANCE

Current Liabilities:
Accounts Payable and Accrued Expenses $ 4,037.
Due to IJCAI, Inc – 1989 Conference 357,413.
Unearned Membership Fees (Note 3) 284,154.
Total Current Liabilities 645,604.

Fund Balance 5,987,702.

The accompanying notes are an integral part of this statement.

American Association for Artificial Intelligence

Statement of Income and Fund Balance for the Year Ended
December 31, 1989

Gross Profit (Loss), By Activity:
AI Magazine Revenue $187,729.
AI Magazine Expenses (234,854.) $(47,125.)
Memberships Revenue (Note 3) 470,651
Memberships Expenses (147,036.) 323,615.
AAAI Press Revenue 7,796.
AAAI Press Cost of Sales (21,441 ) (13,645.)
AAAI Press Operating Expenses (52,467 ) (46,110.)
Symposium ’89 Revenue 28,292
Symposium Expenses (30,227.) (1,935.)
IAAI Conference 1989 68,762
Conference Expenses (133,991 ) (65,229.)
NTU Tech U Revenue 52,374.
NTU Expenses (21,206.) 31,168.
NCAI Proceedings Revenue 53,267.
Proceedings Expenses (9,642.) 43,625
IJCAI ’89 Technical Program Revenue 714,624
Technical Program Expenses (757,840.) (43,216.)
IJCAI ’89 Tutorials Revenue 671,549.
Tutorials Expenses (154,947.) 326,072
IJCAI ’90 Exhibits Revenue 515,600.
Exhibits Expenses (129,861.) 385,739
American Association for Artificial Intelligence
Statement of Income and Fund Balance for the Year Ended
December 31, 1989
(continued from page 28)

IJCAI '89 Program Committee Expenses (199,725.)
IJCAI, Inc.'s share of IJCAI '89 Net Income (86,977.)
AI Journal Revenue, Net (280.)
Interest Income 532,033
Royalty Income & Reprint Permissions 7,327
Net Unrealized Gains on Investment 45,348.
Grants & Scholarships Expended (228,197.)
Prior Years Conferences, Tutorials & Symposia Received (Paid) in 1989 2,785.
Other Publications 1,453.
Gross Profit, Combined 980,373.
Unallocated Operating Expenses (531,820 )
Net Income 448,553.
Fund Bal Balance – Beginning of Year 5,539,149.
Fund Balance – End of Year $5,987,702.

The accompanying notes are an integral part of this statement.

American Association for Artificial Intelligence
Statement of Changes in Financial Position
December 31, 1989

Financial resources were Provided By:
Net income $448,553.
Add: Expenses not using working capital:
Depreciation 42,551
Working Capital provided from operations 491,104
Other uses:
Decrease in Deposits 2,406.
Total Sources 493,510.
Financial Resources – were Used For:
Increase in furniture, fixtures – equipment (17,115.)
Increase in Working Capital 476,395.

Analysis of Changes in Working Capital:
Increase (Decrease) in Current Assets:
Cash – investments 772,438.
Account receivable (30,948)
Prepaid expenses & Advances (45,308 )
Inventory 11,599.

(Increase) Decrease in Current Liabilities:
Accounts payable & accrued expenses 32,453
Due to IJCAI, Inc. (207,413.)
Unearned advertising 48,400.
Unearned membership fees (104,826.)
Increase in Working Capital 476,395.

The accompanying notes are an integral part of this statement.

Note 1: Summary of Significant Accounting Policies
A. Method of Accounting:
The Financial Statements are presented on the accrual basis of accounting.

B. Inventory:
Magazine, tutorial, and proceedings inventory is valued at the lower of cost or market value as of December 31, 1989.

C. Furniture, Fixtures and Equipment:
Furniture, fixtures and equipment are stated at cost, less accumulated depreciation. Depreciation is computed on the straight-line method over estimated useful lives of five to ten years. Furniture, fixtures and equipment consist of the following as of December 31, 1989:

Cost $ 230,924.
Accumulated Depreciation (112,763.)
Net $118,161

D. Income Taxes:
American Association For Artificial Intelligence is exempt from income taxes on its earnings from investments and its exempt function operations under Section 501 (c) (3) of the Internal Revenue Code and Section 23701 (d) of the California Revenue and Taxation Code. Federal and California taxes totaling $23,660 were paid during 1989 on earnings from sales of mailing lists and advertising.

Note 2: Operations
The American Association For Artificial Intelligence (AAAI) was formed in 1979 as a scientific society, to encourage the basic knowledge of what constitutes intelligent thought and behavior and how it can be exhibited in computers. This is accomplished by the AI Magazine, AI Journal, and other AI related publications, AAAI sponsored National Conference (NCAI), Conference on Innovative Applications for Artificial Intelligence (IAAI), NTU University Tutorials, Symposium Series, and the AAAI Workshop Program. In addition, AAAI grants monies to outside institutions and individuals.

Note 3: Memberships
Annual membership in the American Association For Artificial Intelligence is $40 for individuals, $20 for student members, and $60 for academic/corporate library subscriptions. $25 is added to the above for foreign members. Three and five year memberships are also available. All revenue from memberships is included in the AI Memberships gross profit center. Revenues from membership fees are earned ratably over the respective mem-