

AAAI News

*Fall News from the
American Association for Artificial Intelligence*

2002 AAAI Award Winners

Bruce Buchanan, AAAI Past President and Awards Committee Chair, presented the AAAI Awards recently at AAAI-02 in Edmonton, Canada. Each award winner received a certificate and a check for \$2,500.

The 2002 AAAI Classic Paper Award was given to the author of the most influential paper from the Third National Conference on Artificial Intelligence, held in 1983 in Washington, DC. The Awards Committee selected John Canny of the University of California, Berkeley, to receive this award for his paper, "A Variational Approach to Edge Detection." Canny was honored for his creation of the widely used Canny Edge Detector, and his seminal contributions in the areas of



John Canny

robotics and machine perception.

John Canny received his Ph.D. degree from the Massachusetts Institute of Technology in 1987 supervised by Tomas Lozano-Perez. His Ph.D. dissertation, "The Complexity of Robot Motion Planning," received the ACM Doctoral Dissertation award that year. His Masters thesis, "Finding Edges and Lines in Images" was supervised by Mike Brady, and led to the AAAI paper for which he received this award. He has over 100 publications in robotics, computer vision, algebraic algorithms, computational geometry, graphics, HCI, CSCW and computer-assisted learning. He is working on human-centered approaches to design of information systems, and is a founder of the Berkeley Institute of Design.

The AAAI Distinguished Service Award recognizes one individual each year for extraordinary service to the AI community. The AAAI Awards Committee is pleased to announce that this year's recipient was Raj Reddy of Carnegie Mellon University. Reddy was honored specifically for a lifetime of service to the science of artificial intelligence, including significant advances in speech understanding, reasoning, representation, and robotics, the initial formation of the AAAI and service as President: global leadership in the digital library project; and wise counsel to numerous students, colleagues, administrators, and politicians.

Reddy is the Herbert A. Simon University Professor of Computer Science and Robotics in the School of Computer Science at Carnegie Mellon University. He began his academic career as an Assistant Professor at Stanford in 1966. He joined the Carnegie Mellon faculty as an associate professor of

computer science in 1969, became a full professor in 1973, a University Professor in 1984, and was named as the Simon University Professor in 1992. He served as the founding Director of the Robotics Institute from 1979 to 1991 and held the position of Dean, School of Computer Science at CMU from 1991 to 1999.

Reddy's research interests include the study of human-computer interaction and artificial intelligence. His current research projects include spoken language systems; invisible computing, gigabit networks; universal digital libraries; and distance learning on demand.

He is a member of the National Academy of Engineering and the American Academy of Arts and Sciences. He was president of the American Association for Artificial Intelligence from 1987 to 1989. Reddy was awarded the Legion of Honor by President Mitterrand of France in 1984 and the ACM Turing Award in 1994. He is a member and cochair of the President's Information Technology Advisory Committee (PITAC).

For more information about nominations for AAAI 2004 Awards, please contact Carol Hamilton at hamilton@aaai.org or 650-328-3123.

AAAI Intel ISEF Special Awards

Now in its fourth year, the AAAI Special Awards program at the annual Intel International Science and Engineering Fair (ISEF) consists of up to fifteen awards to recognize outstanding achievement in the area of intelligent computation and robotics. The awards are intended for the best exhibits in the area of computer science with an artificial intelligence component. Finalists in other areas with significant computer science components are also eligible. The student authors of each award-winning project share \$1000 and each student receives a certificate and other mementos. The winners and their schools also receive a complimentary one-year membership in the AAAI, including a subscription to *AI Magazine*.

This year, the ISEF was held May 12-18 in Louisville, Kentucky. There were

15 winning projects by 16 students (one team). Eight projects were entered in the category of computer science, four in engineering, one in behavioral and social sciences, one in earth and space sciences, and one in mathematics. The 2002 winners are as follows:

- Jessie Cheng, Armonk, New York: "Comparison of Traditional and ASR-Mediated Literacy"
- Robert Kang Xing Jin, Silver Spring, Maryland: "Automated Detection of Boundaries in Microstructure Images"
- Pascal Tom Getreuer, Colorado Springs, Colorado: "Like a Mouse to Cheese"
- Yilin Nie, Chappaqua, New York: "Using Hidden Dynamic Models to Predict Pitch in English and Mandarin"
- Yindong Yu, Shanghai, China: "Computer Recognition of Emotion in Speech"
- Youngki Park, Jinju, Kyongsangnam-do, South Korea: "Finding Solutions to the Problem That Is Indicated for Last Twenty Years in IDA*"
- Jennifer Pei-Kay Gee, Frederick, Maryland: "Prediction of HIV Treatment Responses Using Neural Networks"
- Kimberly Elise Reinhold, Hilo, Hawaii: "Artificial Neural Networks: Mechanisms of Pattern Recognition and Learning"
- Grant A. Elliott, Riviera Beach, Florida: "Autonomous Structural Engineering through Genetic Algorithms"
- Ulyana N. Horodyskyj, Parma, Ohio: "Evolution in Motion: Orbital Optimization Using Genetic Algorithms"
- Joshua Brent Miller, Melbourne, Florida: "Cooperative Autonomous Robotics Utilizing Ant Pheromone Behavior"
- Colin Patrick O'Flynn, Hamilton, Ontario, Canada: "Autonomous Hovercraft: Power of Neural Nets"
- Elena Leah Glassman, Doylestown, Pennsylvania: "Speech Imitation through Analysis, Synthesis, and Optimization"
- Andrew Robert Pariser and Joseph Jailer-Coley, Port Washington, New York: "Creating More Efficient Multi-Robot Systems Using Peer-to-Peer Networking in Search and Retrieve Problems"
- Chun-Chen Yeh, Chinese Taipei: "Winning Strategies for Games Played with Chips"

AAAI congratulates all the winners! In addition, we would like to recognize the judges, who attended the fair in Louisville and selected the 15 winning projects from many remarkable and worthy entries. Many thanks to Reid

Simmons (chair) for his organizational efforts, and to all the judges, David Atkinson (head judge), Jet Propulsion Laboratory (JPL), California Institute of Technology, David Kortenkamp, NASA Johnson Space Center/Metrica Inc., Carla Gomes, Cornell University, and Sven Koenig, Georgia Institute of Technology, for their generous donations of time and energy.

IJCAI-03 and IAAI-03

The Eighteenth International Conference on Artificial Intelligence will be held August 9–15, 2003 at the Acapulco Convention Center in Acapulco, Mexico. AAAI is a cosponsor of this conference. There will be no AAAI conference in 2003. The Fifteenth Conference on Innovative Applications of Artificial Intelligence (IAAI-02) will be collocated with IJCAI in Acapulco.

IJCAI-03 and IAAI-03 Calls for Technical Papers, Poster Papers, Tutorial Proposals, Workshop Proposals, and other related programs have been mailed to all AAAI members. You can also view this information and more at www.ijcai-03.org (IJCAI-03) and www.aaai.org/Conferences/IAAI/2003/iaai03.html. Inquiries may be addressed to ijcai@aaai.org or iaai@aaai.org.

The deadline for submission of electronic papers to IJCAI-03 is January 14, 2003. IAAI-03 papers are due by January 21, 2003. Please watch the web sites for other announcements regarding the program in 2003.

Student Scholar and Volunteer Program

AAAI is pleased to announce the continuation of its Student Scholar and Volunteer programs. The Student Scholar Program provides partial travel support for students who are full-time undergraduate or graduate students at colleges and universities; are members of AAAI; submit papers to the conference program or letters of recommendation from their faculty advisor; and submit scholarship applications to AAAI by April 15, 2003. In addition, repeat scholarship appli-

cants must have fulfilled the volunteer and reporting requirements for previous awards. In the event that scholarship applications exceed available funds, preference will be given to students who have an accepted technical paper, and then to students who are actively participating in the conference in some way. However, all eligible students are encouraged to apply.

After the conference, an expense report will be required to account for the funds awarded. For further information about the Scholarship Program, or to obtain an application, please contact AAAI at scholarships@aaai.org, or 445 Burgess Drive, Menlo Park, CA 94025. (650) 328-3123.

The Student Volunteer Program is an essential part of the conference and student participation is a valuable contribution. Volunteers will support IJCAI organizers in Acapulco, Mexico. In 2003, a limited number of complimentary technical program registrations will be available for students who volunteer during the conference. Preference will be given to student scholars for the volunteer positions. Local students or students not requiring travel assistance can apply for the Volunteer Program if openings are available. AAAI membership is required for eligibility. For further information regarding the Student Volunteer Program, please contact AAAI at volunteer@aaai.org. The deadline for volunteer applications is April 15, 2003.

Separate travel award programs are available for international students through IJCAI and other national societies. For information regarding any of these international programs, please write to Priscilla Rasmussen at rasmusse@ijcai.org.

AAAI 2002 Fall Symposia

The American Association for Artificial Intelligence's 2002 Fall Symposium Series will be held Friday through Sunday, November 15–17, Sea Crest Conference Center in North Falmouth, Massachusetts. The titles of the five symposia are:

- Chance Discovery: The Discovery and Management of Chance Events

- Etiquette for Human-Computer Work
- Human-Robot Interaction
- Intent Inference for Users, Teams, and Adversaries
- Personalized Agents

A general plenary session, in which the highlights of each symposium will be presented, will be held on Saturday, November 16, and an informal reception will be held on Friday, November 15. Symposia will be limited to between forty and sixty participants. Each participant will be expected to attend a single symposium. In addition to invited participants, a limited number of other interested parties will be allowed to register in each symposium on a first-come, first-served basis. Working notes will be prepared and distributed to participants in each symposium, but will not otherwise be available unless published as an AAAI Technical Report or edited collection.

The final deadline for registration is October 18, 2002. For registration information, please contact AAAI at fss@aaai.org or visit AAAI's web site at www.aaai.org/Symposia/Fall/2002/fss-02.html. A hotel room block has been reserved at the Sea Crest Resort. The cut-off date for reservations is October 10, 2002. Please call 800-225-3110 or 508-540-7602 for further information.

Fall Symposium Series for 2003 Cancelled

We regret to announce that AAAI has decided to suspend the AAAI Fall Symposium Series until such time that the pool of proposals warrants its reinstatement. We hope this will occur very soon! All symposium proposals should be submitted to the 2004 Spring Symposium Series, tentatively scheduled for March 22–24 at Stanford University. Inquiries regarding the series can be directed to Carol Hamilton at sss@aaai.org.

2002 Spring Symposium Series Call for Participation

AAAI presents the 2003 Spring Symposium Series, to be held Monday through Wednesday, March 24–26, 2003, at Stanford University. The titles of the eight symposia are:

- Agent-Mediated Knowledge Management
- Computational Synthesis: From Basic Building Blocks to High-Level Functionality
- Foundations and Applications of Spatio-Temporal Reasoning (FASTR)
- Human Interaction with Autonomous Systems in Complex Environments
- Intelligent Multimedia Knowledge Management
- Logical Formalization of Commonsense Reasoning
- Natural Language Generation in Spoken and Written Dialogue
- New Directions in Question Answering

Symposia will be limited to between forty and sixty participants. Each participant will be expected to attend a single symposium. Working notes will be prepared and distributed to participants in each symposium. A general plenary session, in which the highlights of each symposium will be presented, will be held on Tuesday, March 26, and an informal reception will be held on Monday, March 25. In addition to invited participants, a limited number of other interested parties will be able to register in each symposium on a first-come, first-served basis. Registration information will be available by December 15, 2002. Please contact AAAI at sss@aaai.org or visit our web site at www.aaai.org/Symposia/Spring/2003/sss-03.html.

Submissions for the symposia are due on October 4, 2002. Notification of acceptance will be given by November 8, 2002. Material to be included in the working notes of the symposium must be received by January 20, 2003. The complete Call for Participation is available at the URL listed earlier.

AAAI Executive Council Nominations

Every two years, the AAAI membership elects an individual to serve a two-year term as President-Elect, followed by two years as President, and, finally, two years as immediate Past President. In addition, every year four new councilors are elected to serve three-year terms on the AAAI Executive Council. All elected councilors are expected to attend at least two council meetings per year, and actively partic-

ipate in AAAI activities. Nominees must be current members of AAAI. The Nominating Committee encourages all regular members in good standing to place an individual's name before them for consideration. (Student and library members are not eligible to submit candidates' names.) The Nominating Committee, in turn, will nominate one candidate for President-Elect and eight candidates for councilor in the spring. In addition to members' recommendations, the committee will actively recruit individuals in order to provide a balanced slate of candidates. AAAI members will vote in the late spring.

To submit a candidate's name for consideration, please send the individual's name, address, phone number, and e-mail address to Carol Hamilton, Executive Director, AAAI, 445 Burgess Drive, Menlo Park, CA 94025; by fax to 650/321-4457; or by e-mail to hamilton@aaai.org.

Nominators should contact candidates prior to submitting their names to verify that they are willing to serve, should they be elected. The deadline for nominations is November 1, 2002.

AAAI Membership Fee Increase

AAAI will restructure its fee schedule in 2003 for the first time since 1994. The new fees, effective January 1, 2003, will be:

■ Regular US/Canada	\$95
■ Full time Student US/Canada	\$35
■ Regular International	\$135
■ Full time Student International	\$75
■ Library US/Canada	\$190
■ Library International	\$230

The life membership fee is under review and the new fee will be posted on the web site in October. Current individual memberships include the *AI Magazine*, conference and publication discounts, and online access to the AAAI Digital Library. AAAI will also institute a new category of membership for library access to the AAAI Digital Library in 2003. For further information, please write to membership@aaai.org.

AMERICAN ASSOCIATION FOR ARTIFICIAL INTELLIGENCE	
STATEMENT OF FINANCIAL POSITION	
DECEMBER 31, 2001	
ASSETS	
CURRENT ASSETS:	
Cash	\$ 449,324
Investments - Stated at Fair Market Value (Note 1A & 3)	9,071,883
Accounts Receivable - Trade	36,502
Inventory (Note 1B)	260,831
Prepaid Expenses & Advances	15,617
Prepaid Expenses - Future Events	<u>30,467</u>
TOTAL CURRENT ASSETS	9,864,624
Furniture, Fixtures & Equipment, Net (Note 1C)	49,248
Deposits	<u>5,279</u>
	<u>\$ 9,919,151</u>
LIABILITIES AND NET ASSETS	
CURRENT LIABILITIES:	
Accounts Payable and Accrued Expenses	\$ 216,684
Unearned Membership Fees (Note 4)	<u>214,785</u>
TOTAL CURRENT LIABILITIES	431,469
Net Assets - Unrestricted	<u>9,487,682</u>
	<u>\$ 9,919,151</u>

AMERICAN ASSOCIATION FOR ARTIFICIAL INTELLIGENCE	
STATEMENT OF CASH FLOWS	
FOR THE YEAR ENDED DECEMBER 31, 2001	
Cash Flows From Operating Activities:	
Net (Decrease) in Net Assets	\$(2,313,356)
Adjustments to Reconcile Change in Net Assets to Net Cash Flows From Operations:	
Depreciation Expense	19,669
Net Increase in Accounts Receivable	(30,968)
Net Increase in Inventory	(20,990)
Net Decrease in Prepaid Expenses	71,891
Net Increase in Accounts Payable	97,295
Net Increase in Unearned Membership Fees	4,063
Net Unrealized and Realized Loss on Investments	<u>1,319,197</u>
Net Cash Flows From Operating Activities	<u>(853,199)</u>
Cash Flow From Investing Activities:	
Purchase of Furnishings & Equipment, Net	(8,847)
Sale of Investments, Net of Purchases of Investments	<u>706,549</u>
Net Cash Flow From Investing Activities	<u>697,702</u>
Net Increase (Decrease) in Cash	(155,497)
Cash -January 1, 2001	<u>604,821</u>
Cash - December 31, 2001	<u>\$ 449,324</u>

AAAI Member News

Ron Brachman, President-Elect of AAAI, has been appointed as the director of DARPA's Information Processing Technology Office (IPTO). Brachman will manage the new DARPA Cognitive Information Processing Technology Initiative, which will develop the next generation of computational systems with radically new capabilities. "Cognitive systems" will demonstrate levels of autonomy and reasoning far beyond those of today's systems.

Aravind Joshi is the winner of the third annual David E. Rumelhart Prize. This announcement was made at the Cognitive Science Society meeting at George Mason University on August 9, 2003. The Rumelhart prize is given each year to a cognitive scientist to honor his or her outstanding contributions to the formal analysis of human cognition. This prize was created by the Glushko-Samuelson Foundation to honor David E. Rumelhart, a cognitive scientist who exploited a wide range of formal methods to address issues and topics in Cognitive Science. Joshi will receive his award and give a talk at the twenty-fifth annual meeting of the Cognitive Science Society in Boston, MA, in August of 2003. For a more detailed discussion of the prize and of Joshi's work, please see www.cnbc.cmu.edu/derprize/announce2003.html.

Independent Auditor's Report

I have audited the statement of financial position of American Association for Artificial Intelligence as of December 31, 2001, and the related statements of activities, changes in net assets and cash flows for the year then ended. These financial statements are the responsibility of the Association's management. My responsibility is to express an opinion on these financial statements based on the audits.

I conducted the audits in accordance with generally accepted auditing standards. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit

AMERICAN ASSOCIATION FOR ARTIFICIAL INTELLIGENCE
STATEMENT OF ACTIVITIES AND CHANGES IN NET ASSETS
FOR THE YEAR ENDED DECEMBER 31, 2001

Changes in Net Assets: Gross Profit (Loss), By Activity:

AI Magazine Revenue	\$ 16,944	
AI Magazine Expenses	(197,216)	\$ (180,272)
Memberships Revenue (Note 4)	268,796	
Memberships Expenses	(133,537)	135,259
AAAI Press Revenue	88,582	
AAAI Press Cost of Sales	(135,876)	(47,294)
Spring Symposium 2001 Revenue	70,516	
Symposium Expenses	(69,376)	1,140
Fall Symposium 2001 Revenue	36,953	
Symposium Expenses	(55,057)	(18,104)
Conference Service Fees	53,600	
Conference Service Salaries	(53,600)	-
Technical Program '01 Revenue	512,324	
Program Expenses	(500,970)	11,354
2001 Tutorials Revenue	84,399	
Tutorials Expenses	(94,754)	(10,355)
2001 Exhibits Revenue	30,071	
Exhibits Expenses	(27,340)	2,731
2001 Workshops Revenue	51,044	
Workshops Expenses	(103,380)	(52,336)
2001 IAAI Revenue	28,230	
IAAI Expenses	(43,988)	(15,758)
Prior Year Events Expenses		(9,338)
KDD Sponsorship		11,640
Interest & Dividend Income (investments & cash accounts)		322,263
Realized & Unrealized Gains (loss) on Investments (Note 1A)		(1,319,197)
Investment Management Fees		(104,723)
Grants & Scholarships Expended		(405,117)
Gross Profit (Loss), Combined		(1,678,107)
Operating Expenses		(635,249)
Net (Decrease) in Net Assets		(2,313,356)
Net Assets - January 1, 2001		<u>11,801,038</u>
Net Assets - December 31, 2001		<u>\$ 9,487,682</u>

includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. I believe that the audits provide a reasonable basis for my opinion.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of American Association for Artificial Intelligence as of December 31, 2001 and the results of operations

and cash flows for the year then ended, in conformity with generally accepted accounting principles.

Notes to Financial Statements

Note 1: Summary of Significant Accounting Policies.

A. *Method of Accounting:* The financial statements are presented on the accrual basis of accounting.

Effective for 1996 the Association has changed its method of accounting for investments from "original cost" to "fair market value" as required by the provisions of Statement of Financial Accounting Standards No. 124. The cumu-

lative effect of the change in accounting principle from prior years was shown as an extraordinary item on the statement of Activities for the year ended December 31, 1996. Since investments are stated at fair market value realized and unrealized gains and losses are combined on the statement of activities where in years prior to 1996 only realized gains and losses were shown.

B. *Inventory:* Magazine, proceedings, conference books and publications in process inventory is valued at the lower of cost or market value as of December 31, 2001.

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 at December 31, 2001.

Cost	\$ 210,817
Accumulated depreciation	(161,569)
Net	\$ 49,248

D. *Income Taxes:* American Association for Artificial Intelligence is exempt from income taxes on its earning 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 were paid during 2001 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*, the publications of the AAAI Press, the National Conference on Artificial Intelligence (NCAI), the Conference on Innovative Applications of Artificial Intelligence (IAAI), the International Conference on Knowledge Discovery and Data Mining, the Mobile Robot Competition, the Symposium Series, and the AAAI Workshop Program. In addition, AAAI has an extensive program for student scholarships, women and minority grants, and sponsorship of independent workshops and conferences. Finally, AAAI's World Wide Web Site serves as a central resource for individuals involved in AI research.

Note 3: Investments at December 31, 2001

Investments are stated at fair market value



The AAAI Intel ISEF Science Winners

since it is readily determinable and the investments are not necessarily being held to any maturity. Realized and unrealized gains and losses are reported in the statement of activities.

Investment activity for 2001 is as follows:

Investments -	
Beginning of year	
(At fair market value)	\$ 11,097,629
Unrealized &	
Realized gains (Loss)	(1,319,197)
Interest & Dividends	
(Investments only)	301,207
Total Return	
On Investments	10,079,639
Purchases of Investments	6,295,170
Sales of Investments	(7,001,719)
Interest & Dividends	
deposited to Cash	(301,207)
Investments - End of Year	\$ 9,071,883
Investments consist of the	
following at 12-31-2001:	
U.S. Obligations &	
Corp. Fixed Income	\$ 3,514,637
Common/Preferred Stocks	5,557,246
Total Investments	
- Unrestricted	\$ 9,071,883

Note 4: Memberships
Annual membership in the American Asso-

ciation for Artificial Intelligence is \$50 for individuals, \$20 for student members, and \$75 for library subscriptions. Twenty five dollars is added to the above for other than U.S. and Canadian members. Three, five year, and lifetime 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 membership period. Lifetime membership fees are recognized as income over ten years.

Note 5: Pension Benefits

Prior to 1998 American Association for Artificial Intelligence sponsored a pension plan under Section 403 (B) of the Internal Revenue Code allowing employee contributions to their own individual accounts. Beginning in 1998 the plan expanded benefits to include company contributions to their individual accounts of five percent of their salaries for regular, full-time employees who have worked a minimum of three years at AAAI. In addition, AAAI will match employees' contributions up to five percent of their salaries for regular, full-time employees who have worked a minimum of five years at AAAI.

Note 6: Lease Commitments

The American Association for Artificial In-

telligence entered into a lease agreement for its office space expiring on February 28, 2006. The Association is committed to make minimum annual lease payments of \$112,230 for 2002, \$126,670 for 2003, \$141,010 for 2004, \$155,350 for 2005, and \$26,290 for 2006.

Emendation

The book review by Atocha Aliseda published in the Spring issue (Volume 23 number 1) did not include the author's autobiographical data. We include it below. An updated version of the review (containing this information) is included on the *AI Magazine* website:

Atocha Aliseda (atocha@servidor.unam.mx) is a full professor at the Institute for Philosophical Research of the National Autonomous University of Mexico and "breedtestrategiepostdoc" at the Faculty of Philosophy in Groningen, The Netherlands. She obtained her Ph.D. from Stanford University in 1997. Her main research interests are abductive logic and the connection between philosophy of science and AI.

AAAI-02 in Edmonton— A Scrapbook







