# AAAI News

AAAI-92 Opens New Windows on Expanded AI Activity

The American Association for Artificial Intelligence concluded its national conferences in San Jose on July 16 with a surge of optimism and confidence in the current position and forward movement of AI. This holds true in both scientific and business areas, according to AAAI President Patrick Hayes.

"This year's conferences clearly demonstrated the expanding boundaries of AI," Hayes said. "This was the first AI art exhibition and the first time this many mobile robots have ever been together. The invited talks made some exciting new connections. I was especially excited by Christopher Langton's survey of 'Artificial Life' and Dana Ballard's new approach to visual perception. Yorick Wilks' talk showed that machine translation is really getting somewhere, and Andrew Barto's survey of learning sounded a powerful theme." Other talks included Lawrence Hunter's "AI and Molecular Biology" and Roger Schank's "AI and Multimedia," focusing on actual learning and AI indexing of knowledge. This is all in addition to presentations on new developments in relatively traditional areas like constraint-based research, text-based systems and machine translation.

More than ever, the conferences lived up to their commitment to interest people in areas outside their own, Hayes noted. "The buzz, the excitement in AI is on the fringes of each field or technology, where they interact with another." Cochairs Paul Rosenbloom and Peter Szolovits pointed out that the objective of the new robotics competition was to bring all the pieces together, creating self-contained mechanical individuals using AI to fend for themselves. The AI Art Show, curated by Carnegie Mellon's Joe Bates, displayed programs that had the ability to speak with feeling, an artificial Mozart, and computers
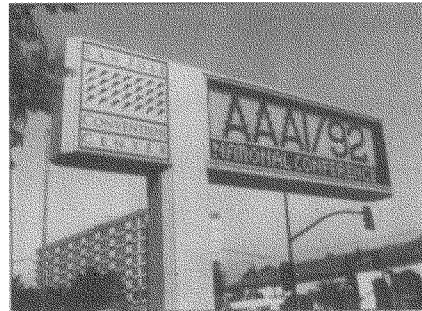
*San Jose was the place to be in July, 1992*

with enough intelligence to give fictional characters feelings and attitudes and goals with which "readers" can interact.

Learning provided a major theme at the conference, with keynote speaker Oliver Selfridge celebrating "the joy of why we're here: to start to understand the mysteries of the human mind. The question for us," he declared, "is to know who we are, what makes us grow, think, feel. Knowing ourselves is a more challenging task than knowing the physical world we live in—and key to the future. The real center of AI is learning. AI is not a simple goal to be achieved, a technology to be mastered, Selfridge said. "It is a process through which we aim to find out what we can about the human mind and soul." He applauded the impressive AI advances in practical applications as well as ideas.

On the applications side, the Innovative Applications in Artificial Intelligence conference showcased nineteen winning entries that documented both innovative AI technology and significant payback. Chair Carli Scott said, "The wide range of tasks and industries represented among these presentations shows current proof that AI is now an accepted part of most of the world's major organi-

zations." Many of the applications had enough scale so that users indicated the AI systems were in fact changing corporate culture, forcing needed reengineering of basic business practices. "Organizations today need to pool knowledge and make it available to everyone instantly. That calls for AI/Knowledge-Based approaches," Digital's Themis Papageorge said. Thomas Kaczmarek of General Motors noted in one session that "the paradigm changes in business are forcing people to be more intense knowledge workers—and that increasingly calls for AI solutions."

Ebby Adhami of Ernst & Young/UK presented National Westminster Bank's PHAROS program that details European marketing possibilities for the bank's customers. Introduced less than a year ago, it has 135,000 users currently. It is an example of AI as marketing tool, he noted, opening a whole new communications channel for the bank. It was, typically, an AI solution to a major problem where the person who instigated the project knew only that he had a problem, not that AI was the answer. The global reach of AI also came across in the CRESUS presentation of Spain's Union Fenosa. Its new AI cash management system showed a $2,000,000 annual savings while delivering more efficient solutions. Dealing with uncertainty and the need for instant
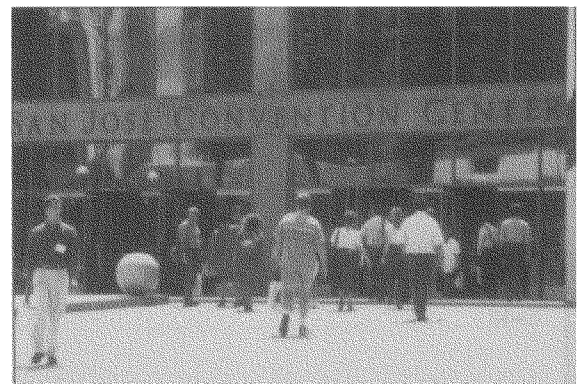
AAAI Councilors Nominations

AAAI is seeking nominations for its councilors. Candidates must be AAAI members. Councilors are expected to actively participate in the organization and attend at least two council meetings each year Councilors serve a three-year term.

Please contact the person you are nominating before you submit their name.

We must receive this form and a brief biographical sketch of the nominee on or before March 1, 1993.

Information on nominee (please print or type)

Name _____

Position _____

Organization _____ Department _____

Address _____

City _____ State _____ Zipcode _____

Telephone _____ Email _____

Information on nominator (please print or type)

Name _____

Position _____

Organization _____ Department _____

Address _____

City _____ State _____ Zipcode _____

Telephone _____ Email _____

Please send this form and a brief biographical sketch of the nominee to:

AAAI Nominations
445 Burgess Drive
Menlo Park, California 94025

You can fax the information to us at 415-321-4457. For more information contact Carol Hamilton at hamilton@aaai.org or 415-328-3123.

I _____

nominate _____

to be a councilor of the American Association for Artificial Intelligence.

Signed _____

Date _____

IAAI-92 Cochairs Carli Scott (left) and Phil Klahr with Elizabeth Byrnes

response, CRESUS "searches the world in minutes, and points up inefficiencies, a process that would have taken hours to do, hours that are simply not available." The AI approach, according to developer Pete Shell, created a solution that linear techniques could not.

"What we've seen at AAAI-92," Hayes said, "is that the AI idea has been bought. The science is expanding. The applications are proliferating. On the scientific side, we're pleased with the way the conference and the various AI fields are reaching out. And this in turn has led to some stunning successes in practical applications. What happened at San Jose clearly made another point: it is just not productive to try to 'put a line around AI' and tightly define it. AI continues to evolve, continues to involve other technologies and disciplines — and be integrated with them. There is a coherency to the AI concept which people need to understand, but the outer edges of AI will keep moving." Hayes pointed out that great debates continue within the AI community. "That's as it should be," he said, "it's tension among true believers that drives advances in both science and application."

Next year's AAAI and IAAI conferences will be held in Washington, DC., July 11-16, 1993. For information, call or write AAAI, The American Association for Artificial Intelligence, 445 Burgess Drive, Menlo Park, CA 94025. Phone 415-328-3123 or fax 415-321-4457.

AAAI–92 Spotlights First AI Mobile Robot Competition

The first annual AAAI Mobile Robotics Competition took center stage at the American Association for Artificial Intelligence's annual conference in San Jose on July 14-16.
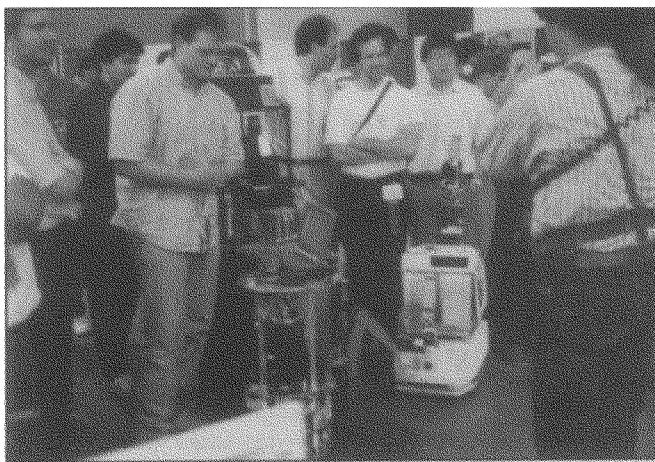
AAAI's Robotics Competition and Exhibition spurred much excitement and interest.

The University of Michigan's Carmel took top honors, with Flakey from Stanford Research Institute second and Carnegie Mellon's Odysseus third. The competition attracted entrants from a dozen laboratories around the country. The robots went through their paces in the three-day event, clearly demonstrating advances in the state of the art, according to cochairs Tom Dean of Brown University and Pete Bonasso of MITRE Corp.

Other entrants ranged from IBM to the San Francisco Robot Society. In addition, a number of mobile robots were on exhibition. These included Georgia Institute of Technology's "Flying Fusco Brothers" airborne robot and MIT AI Lab's Bert and Ernie, a pair of robots with speed learning capability.

"We wanted this contest to point up the higher-level cognitive possibilities for mobile robots and demonstrate the longstanding symbiotic relationship between AI and robots," said AAAI President Patrick Hayes. "I think we've done it. The work done to get these mobile robots ready for competition has advanced the state of the art significantly. We've also helped

educate people on the high degree of intelligence robots need to function autonomously in an unstructured environment while coping with interference. Life isn't neat or simple, and robots need to be able to handle it. Our focus is on technology stimulus and transfer, rather than the competition itself. The sharing, the exchange of ideas and enthusiasm on the part of these teams is the real excitement here." The contest will be a continuing event, Hayes said.

AAAI Fellows Nominations

The AAAI has a Fellows program to recognize people who have made significant sustained contributions to the field of artificial intelligence, usually over a period of ten or more years.

In mid-October, nomination materials for 1993 Fellows will be available. We'd like to encourage you to give careful consideration to persons deserving this recognition. If you wish to nominate someone, please let us know. We'll send you a form and more particulars about the program.

For more information about the fellows program, contact AAAI at fellows-93@aaai.org.
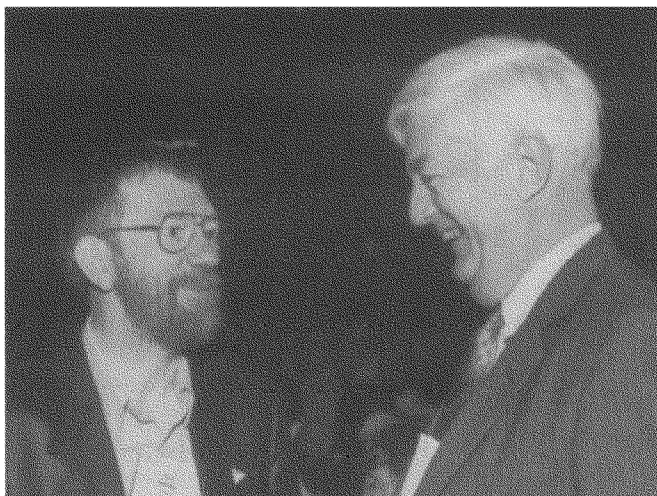
AAAI President Pat Hayes (left) confers with keynote speaker Oliver Selfridge.