AAAI-86: Experimenting With a New Conference Format

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During the balmy summer of 1980, about 800 AI researchers met on the Stanford campus to hold the first AAAI conference. The conference program had no more than two parallel sessions, and heated discussions on technical topics freely occurred from the floor. For many of those attendees, it was a special, unique opportunity to have deep colleagial interactions in a very comfortable setting.

Even the first national conference, however, was more than a gathering of researchers. There were many signs of change in the air. For example, there were well-attended panels on AI and business, the tutorial program was inaugerated and overflowing, and several kinds of personal Lisp machines were demonstrated and declared to be the coming things.

Through the years the annual AAAI conference, like the AI community itself, has grown in size, interest, and diversity. This growth has stimulated considerable discussion about the conference's format and objectives. From the research community, perhaps the most common complaint has been that the technical sessions have become too large for informal discussion. At the same time applications-minded persons have complained that the technical sessions have become too arcane to be relevant.

During the fall of 1984, President Woodrow Bledsoe requested that the Conference Committee, chaired by Jay M. Tenenbaum, investigate this situation and present options to the Executive Council. This led to extensive discussions by both the Committee and Council, and ultimately to a proposal for an experimental new format for the AAAI-86 conference next summer in Philadelphia. In many ways, the discussion required the Executive Council to carefully consider the goals of AAAI and the purpose of the annual conference. This article will describe the purpose of the new format, the Committee's recommendation, and some expanded ways for members to participate in the conference this year.

Conference Goals

The most radical change that was considered, but not adopted, was the division of the science and engineering interests into two separate conferences at different times of the year. Many Council members expressed concern that this would be detrimental to the evolution of the field.

Although having two separate conferences was judged undesirable, it was generally agreed that independent technical programs for science and engineering would improve matters. The science program will emphasize the computational principles underlying cognition and perception in man and machine through the presentation of original and significant research findings. The engineering program will present foremost examples of engineering practice with in-depth analyses of problem domains and novel approaches to implementations and system integration. New topical areas in the engineering program would include applications, impacts of AI technologies, signal understanding and user interface technology.

The two programs would be presided over by two co-program chairs who would coordinate their efforts. While rigorous reviewing standards would be required for all submitted papers, it was recognized that the criteria for judging interesting science and interesting applications are different. This led to a search for alternative plans for the conference and an articulation of the following goals and criteria:

- The conference should foster colleagial interaction, including both ad hoc workshops and more discussion in the official technical sessions.

- The complete conference should be five days long.
- The conference should enable members to attend both the science and engineering sessions.
- All attendees should be able to conveniently visit the Exhibit Program.
- Tutorials should occur before the engineering sessions.
- An attendee with a focused interest in either science or engineering should be able to have a shorter stay at the conference without missing any technical sessions. This would be less costly for the attendee or the sponsoring institution.

Of these goals, the first and second were considered the most important. The format for 1986 should encourage discussion and the free exchange of ideas. A big conference already makes it possible for attendees to learn about work outside of their areas, but in the past few years the opportunities for more intense interchange of ideas among specialists have diminished. Some of the workshop atmosphere needs to be recaptured. The goal for keeping the conference five days long reflects the realities of booking facilities for conferences.

A Plan for 1986

Several different conference formats were considered. The selected plan for AAAI-86 (See Figure 1) contains several new ideas.

An important feature is that there will be both sessions and workshops. Sessions will be what they have been in the past, formal presentations of papers that have been submitted, reviewed, and accepted for the conference. Scientific sessions will occur during the first two days of the week, and engineering sessions will occur during the last two days of the week.

The emphasis on workshops is an innovation for this year. They are intended to provide more intimate forums for the exchange of ideas. Workshops may correspond to the topics of sessions or they may be about topics peripheral to the technical program. For example, there may be science workshops on non-monotonic logic or planning; there may be engineering workshops on medical expert systems or mechanical engineering applications. Workshops can be open to the public or they can be by invitation only, following the discretion of their organizers. They can range in length from two hours to two days. Workshops can be proposed by any AAAI member; requests will be reviewed by the program co-chairs. Open workshops that are planned early enough will be listed in the official conference brochure.

The middle day of the conference (Wednesday) will highlight some important business of the conference. It will include the Presidential Address and also the major technical plenary sessions. These sessions will be invited talks, representing the best of the science or applications in AI. The conference banquet will take place Wednesday
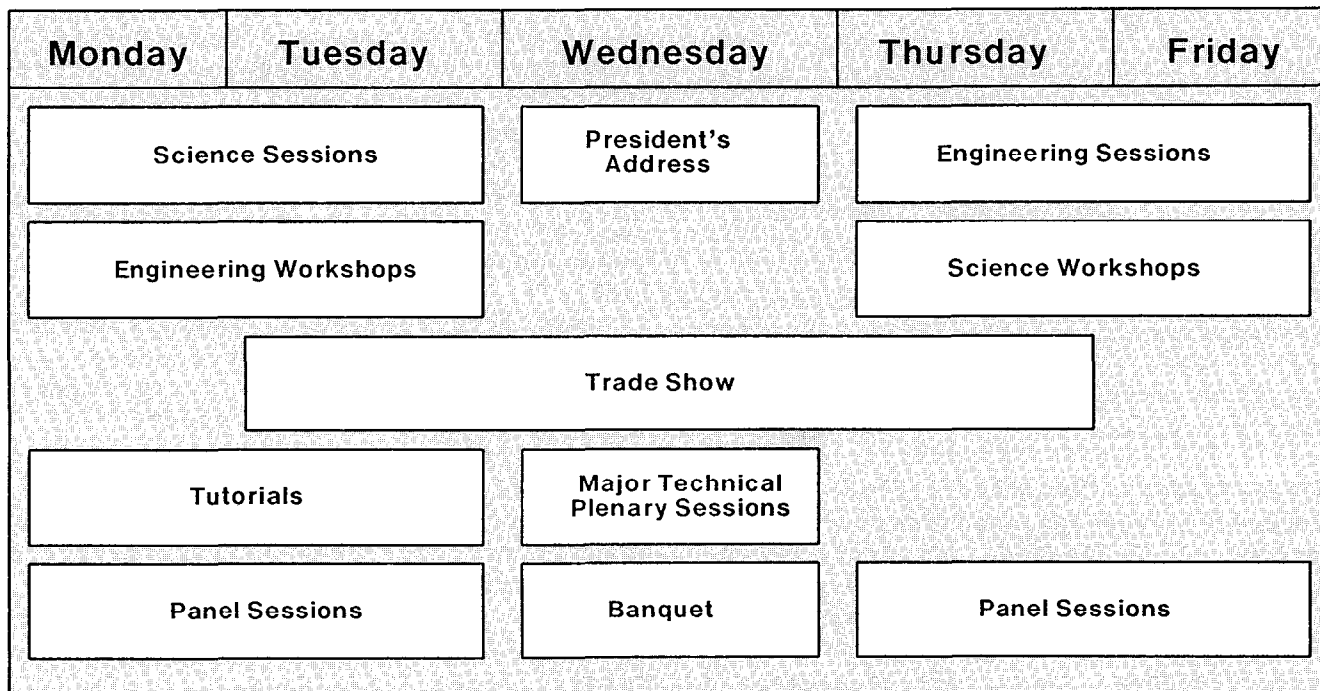

Monday	Tuesday	Wednesday	Thursday	Friday

Science Sessions | President's Address | Engineering Sessions

Engineering Workshops | Science Workshops

Trade Show

Tutorials | Major Technical Plenary Sessions

Panel Sessions | Banquet | Panel Sessions

Figure 1.

evening.

Panel sessions will be distributed through the week except Wednesday. As in the past, panel sessions will be used for debates of social, economic, and scientific interest. The trade show will take place during the middle three days of the conference. The trade show's reduction from five to three days is in response to requests from vendors. It will enable them to reduce their costs while still reaching attendees in all tracks through the conference.

Tracks Through the Conference

The proposed conference format enables alternative paths through the conference for attendees with different interests. Conference registration will reflect the different tracks in that an attendee can sign up for the science track, the engineering track, or both.

Most members of AAAI seem to have a major interest in engineering and applications. These attendees can start the week by joining either the engineering workshops or the larger panel sessions. Open workshops will be listed in the registration materials and members are encouraged to submit proposals. For newcomers to AI, tutorials will also be available on the first two days. The formal technical sessions on engineering and applications will begin on Thursday. Persons interested in limiting their stay to three days can join the conference on Wednesday.

Members of AAAI primarily interested in the basic research session will start on Monday. Panel sessions will run in parallel for at least part of the day. With the other activities running in parallel, it is expected that attendance at the scientific sessions will be smaller than in the past few years. This small size is intended to allow more opportunity for discussion.

Workshops on scientific topics occur during the last two days of the week so that they won't overlap with the formal scientific sessions. AAAI hopes to encourage dialog in the community by making these workshops convenient to the attendees, and by arranging the technical program so that workshops can be as long as two days.

Attendees interested in both the scientific and engineering technical programs can attend both technical sessions at opposite ends of the week. A typical path might include a combination of some scientific sessions, some application sessions, and a workshop.

Feedback

After AAAI-86 concludes, the new conference format will be evaluated for its overall effectiveness and attendee satisfaction, and if necessary, it will be modified again.

As with any change, we look forward to your comments and continued support. Please submit your comments to Claudia Mazzetti, AAAI, 445 Burgess Drive, Menlo Park, CA 94025 (AAAI-Office@SUMEX-AIM).

Submitting Proposals

To allow for advance time to prepare conference materials, it is necessary to get proposals for tutorials, panel sessions, and workshops to AAAI in the next couple of months. Members are encouraged to contact the conference committee as indicated below:

General Questions

Claudia Mazzetti
AAAI Office
445 Burgess Drive
Menlo Park, California 94025-3496
(415) 328-3123
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Tutorial Proposals
Due by: January 7, 1986

Mark Stefik
Tutorial Chairman for AAAI-86
Xerox Palo Alto Research Center
3333 Coyote Hill Rd
Palo Alto, California 94304
(415) 494-4366
Stefik@XEROX.ARPA

Scientific Workshop Proposals
Due by: March 1, 1986

Stanley Rosenschein
Program Co-Chairman for AAAI-86
SRI International
333 Ravenswood Avenue
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(415) 859-4167
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Application Workshop Proposals
Due by: March 1, 1986

Tom Kehler
Program Co-Chairman for AAAI-86
IntelliCorp
1975 El Camino Real West
Menlo Park, California 94040
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Kehler@USC-ECL

Panel Session Proposals
Due by: March 1, 1986

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