

Report on the 1986 Artificial Intelligence and Simulation Workshop

The first Artificial Intelligence (AI) and simulation workshop was held during the National Conference on Artificial Intelligence (AAAI-86) on 11 August 1986 at Wharton Hall, the University of Pennsylvania. It was attended by over forty participants from academic, government, and industrial institutions. It included paper presentations, informal discussions, and a panel summary of AI and simulation applications in the areas of: (1) State of the art and future directions in AI and simulation (Arthur Gerstenfeld, Worcester Polytechnic Institute); (2) AI problem solving using simulation (Y.V. Ramana Reddy, University of West Virginia); (3) Knowledge representation issues related to simulation (Marilyn Stelzner, Intellicorp); (4) Engineering issues related to AI and simulation (Dick Modjeski, US Army Concepts Analysis Agency). Individual presentations given in each of the above areas of the workshop are published in a technical report distributed by the Defense Technical Information Center (DTIC Number AD-A174 053). A copy of the report can be obtained by calling DTIC at (202) 274-6847/6874.

The fields of computer simulation and artificial intelligence offer each other something of value. The methods and techniques of each discipline offer a fresh approach to revitalizing each other. The intersection of AI and simulation may offer a unique application of computer science that may be of use to both fields. Many of the concepts in this area of AI applied from simulation are developed from engineering and computer science

application experiments. Some formalisms have appeared but much work needs to be done to establish relations between constructs and processes. Applications developed using combinations of AI and simulation techniques by universities, industry, and government have demonstrated that this aspect of AI is already maturing as a useful area of development.

LTC Russell E. Frew, Program Manager of the Air-Land Battle Management Project, Defense Advanced Research Projects Agency (DARPA), suggested that their was growing interest in applying AI and simulation within the Department of Defense. A request was made that concept papers in this area be sent to DARPA.

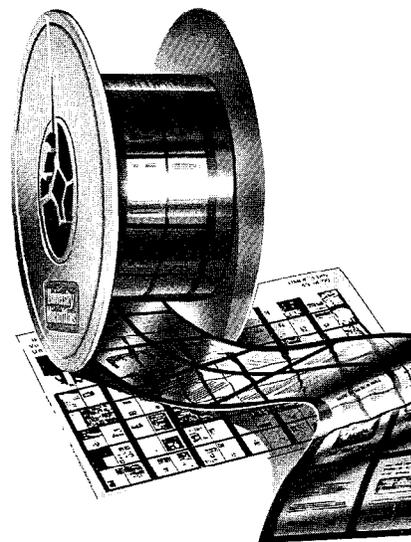
The Second Workshop on AI and Simulation was held on 14 July 1987 in conjunction with the AAAI-87.

For further information, contact Richard B. Modjeski, US Army Concepts Analysis Agency, Advanced Research Projects Office 8120 Woodmont Ave, Bethesda, Maryland 20814

AI Magazine Archives

AAAI has established AAAI and *AI Magazine* archives at the Special Collections Department, Stanford University Libraries. Michael Ryan, Curator of Special Collections acknowledged the gift: "On behalf of the Stanford University Libraries, I am pleased to acknowledge your very welcome gift of fifteen linear feet of records relating to *AI Magazine*, from 1980 to 1987. Including correspondence, manuscripts, and audio/visual materials, the AAAI records will be an important part of our effort to document the origins and growth of the discipline of computer science."

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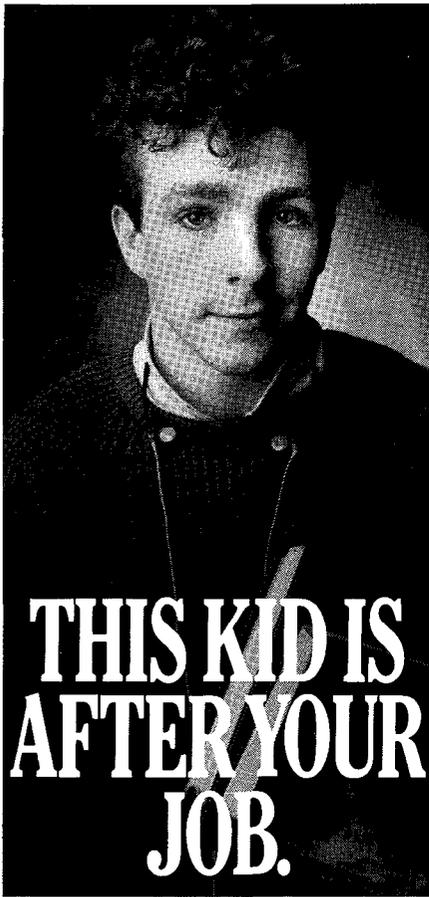
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AAAI-88 Call for Papers

The Seventh National Conference on Artificial Intelligence will be held 22-26 August 1988 in St Paul, Minnesota. The purpose of the conference is to promote research of the highest caliber in artificial intelligence (AI) and to promote scientific interchange among AI researchers and practitioners.

AAAI-88's technical program will present outstanding research papers in AI. In each of the following sub-areas, papers may range from science to engineering. Papers may represent significant contributions to the development of computational principles underlying cognition and perception in man and machine, or significant contributions to the state of the art in AI practice. In the case of papers with an engineering orientation, particular attention will be given to those that present an in-depth analysis of experience with AI techniques in substantial applications, especially if authors are able to generalize the problem domain characteristics for which the chosen techniques are applicable.

Topics of interest include AI and education, automated reasoning (including automatic programming, planning, rule-based reasoning, search, theorem proving, uncertainty), cognitive modeling, commonsense reasoning (including default reasoning, naive physics, qualitative reasoning, temporal reasoning), expert systems (including systems emphasizing design, information retrieval, interpretation, classification and diagnosis, troubleshooting, simulation, and system integration), impacts of AI technology (including organizational, economic, and social implications), knowledge acquisition—acquiring knowledge from experts or nonexperts, knowledge representation—formalisms and systems for representing knowledge, machine architecture and computer languages for AI—hardware and software designed for building AI systems, machine learning, natural language (including generation and understanding), perception and signal understanding (including speech,

vision, and data interpretation), philosophical foundations, robotics, and user interfaces (including interfaces using AI techniques and interfaces for AI systems).

Requirements for Submission

Timetable. Authors must submit six (6) complete copies of their papers (hard copy only—we cannot accept online files) to the AAAI office (address noted on this page). Papers must be received in that office by Tuesday, 8 March, 1988. Papers received after this date will be returned unopened. Notification of receipt will be mailed to the first author (or designated author) soon after receipt. All enquiries regarding lost papers must be made by 15 April 1988. Notification of acceptance or rejection will be mailed to the first author (or designated author) by 29 April 1988. Camera-ready copy of accepted papers will be due approximately one month later.

Appearance. Each copy of the paper should be clearly legible. Good quality print is required. (Dot-matrix printout is not acceptable unless truly of letter quality.) Papers should be printed on 8-1/2" by 11" paper (although European A4 size is also acceptable), with at least 1-1/2" inch margins, using 12 pt. type (pica type for typewriters). (The LaTeX or Scribe "article" styles, with "12pt" type, conform to these requirements and should be used if possible.)

Length. Authors must restrict the body of their papers to 4,000 words, including allowances for figures, tables, and diagrams, but not including the bibliography. Each full page of figures is equivalent to at least 500 words.

Title Page. Each copy of the paper must have a title page (separate from the body of the paper) containing the title of the paper, the names and addresses of all authors, a short (less than 200 word) abstract, and the length (in words) of the body of the paper (including allowances for figures, tables, and diagrams). The title

page must specify exactly one topic from the above list of topics (as well as a subtopic, if applicable) as the main topic of the paper. This information helps determine which members of the program committee review each paper and influences the criteria for acceptance. Use the descriptions in the list of topics from this call for papers and accepted papers from past AAAI conferences to determine this information. A secondary group of topics or subtopics may also be specified if necessary to characterize the content of the paper.

Submissions to Multiple Conferences. Papers which are also being submitted to other conferences, whether verbatim or in essence, must have this fact clearly indicated on the title page. With the exception of workshops with a specialized focus, papers which appear at other conferences must be withdrawn from AAAI-88.

Failure to meet any of the requirements above is grounds for summary rejection, without refereeing.

Review Criteria. Each paper will be stringently reviewed by experts in the area specified as the topic of the paper. Acceptance will be based on the overall merit and significance of the reported research, as well as the quality of the presentation. Please refer to past winners of the Publishers Prize or Best Paper Awards as exemplars.

All papers should make an original and significant contribution to knowledge in the field of artificial intelligence. Papers should emphasize either their contribution to the development of computational principles underlying cognition and perception in man and machine, or their contribution to the state of the art of AI practice. Authors may explore limitations of current technology, problems with technology transfer, novel implementations of existing computational models, system integration, or matching AI methods to problem domains.

The Program Committee will select a set of outstanding papers, with suitable awards which will be given during the conference. Award winners will present their papers during a special plenary session of the conference.

Publication. Accepted papers will be allocated five (5) pages in the confer-

ence proceedings. At most one additional page can be used, at a cost to the authors of \$250. Papers exceeding six pages, and papers violating the instructions to authors, will not be included in the proceedings.

Please send papers and conference registration inquiries to:
AAAI-88
American Association for
Artificial Intelligence
445 Burgess Drive
Menlo Park, CA, 94025-3496

Please send program suggestions and inquiries to:

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