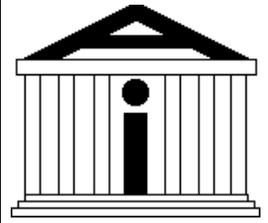




# AI & LAW

## NEWS



December 1993

International Association for Artificial Intelligence and Law

Vol. 2, No. 2

## ***ICAIL-93 a Success in Amsterdam!***

by Carole Hafner

On June 15-18, the 4th International Conference on Artificial Intelligence and Law was held at the Vrije Universiteit Amsterdam, The Netherlands.

Thanks to the outstanding organization provided by Conference Chair Anja Oskamp of the Computer/Law Institute and Program Chair Kevin Ashley, the conference was successful both scientifically and socially.

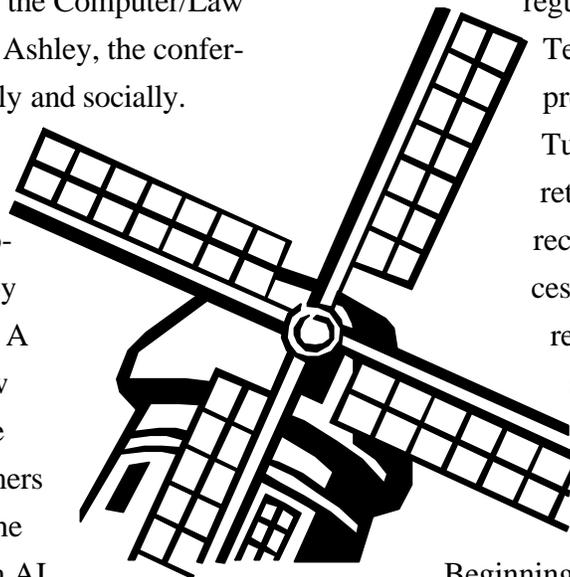
Tutorials were held the day before the formal beginning of the conference. They included an Introduction to AI and Law presented by Donald Berman and Kevin Ashley. A general introduction to AI and Law has become a regular feature of the tutorial program, allowing newcomers to the field to get an overview of the goals and current research issues in AI and Law, so they can better appreciate the research presentations that follow. Another continuing feature of the tutorial program is a workshop presented by Andrew Jones and Marek Sergot on recent work in deontic logic. This year the workshop focused on comparing two approaches to representation of regulations: the approach of Layman Allen and Charles Saxon, and an approach developed by Jones

and Sergot based on the theory of normative positions. Since Professors Allen and Saxon also attended the workshop, attendees had the opportunity to get an insider's view of the issues in formal modeling of legal

regulations. The final tutorial was on Text Retrieval in the Legal World, presented by Howard Turtle. Dr. Turtle is an expert on information retrieval and the inventor of the recently introduced WIN query processor in the Westlaw on-line legal retrieval system, which embodies several AI techniques. Dr. Turtle reviewed the state-of-the-art in text retrieval and described his own contributions.

Beginning on June 16 with a welcome by Professor Rik Kaspersen, director of the Computer/Law Institute, the formal program of research presentations extended over three days. Thirty-seven papers were presented, with authors from ten countries and four continents. A number of authors described logical systems for representing normative rules and performing non-monotonic inferences. Others presented

*Please turn to the back page.*



# ***Focus on Research***

## **University of South Africa**

Professor Dana van der Merwe, Law Faculty, University of South Africa, Pretoria and Professor van der Merwe's doctoral student, Ms. Karen Alheit, are engaged in a research project addressing legal liability issues arising from the use of expert systems. The goal of the research is identifying all possible parties who may be legally liable when the use of expert systems leads to criminal and/or civil liability in South African law. The project investigates the parties' respective legal positions under South African legal principles and undertakes a comparative study of liability issues under English and American law. For more information, contact Professor van der Merwe at [vdmerdp@risc6.unisa.ac.za](mailto:vdmerdp@risc6.unisa.ac.za).

## **University College London**

Under the supervision of Professor John A Campbell and Dr. Mark Levene, Kamalendu Pal, research student at University College London, is developing a hybrid system that combines both general legal rules and previous legal cases. The objective of the system is to reproduce judicial reasoning in the domain of financial and property settlements in divorce proceedings. For more information, contact Kamalendu Pal, Department of Computer Science, University College London, Gower Street, London WC1E 6BT, UK. Email: [P.Pal@cs.ucl.ac.uk](mailto:P.Pal@cs.ucl.ac.uk)

## **Coming in *Artificial Intelligence and Law***

The following articles appear in Vol. 1, no. 4 of the *Artificial Intelligence and Law* journal, which came out earlier this month:

- Oskamp, A., *A Model for Knowledge and Legal Expert Systems*
- Van Der Wees, J. Juricas: *Legal Computer Advice Systems*
- Widdison, R. et. al. *The European Conflicts Guide*

Volume 2 of the journal will include a special section devoted to the following invited talks at the 4th International Conference on Artificial Intelligence and Law:

- Crombag, H., *On the Artificiality of Artificial Intelligence*
- Philipps, L., *Artificial Morality and Artificial Law*

Readers will be invited to respond to these two talks.

In addition, volume 2 will contain a technology report by Harbidge, M., and Catchpole, M., entitled *PHAROS: Business Advisor* and the following additional articles:

- Branting, K., *A Computational Model of Ratio Decidendi*
- Cuthill, B. & McCartney, R., *Issue Spotting in CHASER*

## **Recent Conferences**

The Sixth JURIX International Conference on Legal Knowledge-Based Systems (JURIX '93) was held on November 26 at the University of Twente, Enschede, the Netherlands. The theme of the conference was the applications of knowledge-based techniques in support of the legislative process. The conference focused both on intelligent tools to support legal drafting and knowledge-based approaches to comparing different laws. The proceedings will appear in *Legal Knowledge Based Systems by Koninklijke Vermande B.V.* For more information, contact J.S. Svensson, Congress secretariat, University of Twente, E-mail [jurix93@bsk.utwente.nl](mailto:jurix93@bsk.utwente.nl)

"Towards a Global Expert System in Law," a conference in celebration of the 25th anniversary of the Istituto per la documentazione giuridica of the Consiglio Nazionale delle Ricerche, was held in Florence, Italy, on December 1-3. The focus was on legal rules related to the environment or health. For more information, contact Simona Binazzi or Gabriella Bargellini, Conference Secretariat, E-mail: [25conf@idg.fi.cnr.it](mailto:25conf@idg.fi.cnr.it) (internet), [25conf@ifidg](mailto:25conf@ifidg) (bitnet)

## **Recent Dissertations in Law and AI**

James David Popple recently completed a Ph.D. thesis at the Australian National University entitled "SHYSTER: A Pragmatic Legal Expert System" The thesis argues that a complex model of legal reasoning at the philosophical level of jurisprudence is unnecessary and that a useful system should operate at the same pragmatic level of abstraction as does a lawyer.

SHYSTER attempts to model the way in which lawyers argue with cases, but it does not attempt to model the way in which lawyers decide which cases to use in those arguments. The model employs statistical techniques to quantify the similarity between cases. The thesis describes four different and disparate areas of law where SHYSTER has been used and details extensive testing of the system. For more information, contact James Popple, Department of Computer Science, Australian National University, GPO Box 4, Canberra, ACT 2601, Australia

# ICAIL-95 Planned for Washington, D.C., Area

The Fifth International Conference on Artificial Intelligence and Law will be held in suburban Washington, D.C., on the campus of the University of Maryland, in College Park, Maryland, USA. The main conference will take place on May 22-24, 1995, and it will be preceded by a day of tutorials and workshops on May 21, 1995.

Professor L. Thorne McCarty from Rutgers University will be the Conference Chair, and Professor Trevor Bench-Capon from the University of Liverpool will be the Program Chair. The conference will be sponsored by IAAIL, as it was in 1993, and hosted by UMIACS, the University of Maryland Institute for Advanced Computer Studies. Professor John

Horty from the University of Maryland will be the Local Arrangements Chair.

By holding ICAIL in suburban Washington, D.C., IAAIL hopes to foster greater cooperation and collaboration between the AI/Law research community and the Washington legal and governmental communities. Special events are being planned within the District to bring these communities closer together. Any members of IAAIL who would be interested in participating in the planning process should contact the conference organizers.

An official "Call for Papers" will be available in the Spring of 1994.

## Reviewers Sought for Books on AI and Law

The journal of Artificial Intelligence and Law has received the following books for review. If you would be interested in reviewing any of these for the journal, please send mail to Anne Gardner, gardner@cs.stanford.edu or 286 Selby Lane, Atherton, California 94027.

- Patricia Bizzell and Bruce Herzberg. *The Rhetorical Tradition: Readings from Classical Times to the Present*. Bedford Books of St. Martin's Press, Boston, 1990. 1282 pp.
- Ronald J. Brachman, Hector J. Levesque, and Raymond Reiter. *Knowledge Representation*. A Bradford Book, The MIT Press, Cambridge, 1992. Reprinted from *Artificial Intelligence*, vol. 49, nos. 1-3, 1991. 408 pp.
- S. C. Coval and P. G. Campbell. *Agency in Action: The Practical Rational Agency Machine*. Kluwer Academic Publishers, Dordrecht, 1992. 206 pp.
- Robert Cummins and John Pollock, eds. *Philosophy and AI: Essays at the Interface*. A Bradford Book, The MIT Press, Cambridge, 1991. 304 pp.
- Cary G. deBessonnet. *A Many-Valued Approach to Deduction and Reasoning for Artificial Intelligence*. Kluwer Academic

Publishers, Boston, 1991. 248 pp.

- Philip Leith. *The Computerised Lawyer: A Guide to the Use of Computers in the Legal Profession*. Springer-Verlag, London, 1991. 222 pp.
- Antonio A. Martino, ed. *Expert Systems in Law*. North-Holland, Amsterdam, 1992. Proceedings of the 3rd International Conference on Logic, Informatics, Law, held in Florence, Italy, November 1989. 435 pp.
- Richard A. Posner. *The Problems of Jurisprudence*. Harvard University Press, Cambridge, 1990. 485 pp.
- Henry Prakken. *Logical Tools for Modelling Legal Argument*. Vrije Universiteit, Amsterdam, 1993. 244 pp.
- Alexander E. Silverman. *Mind, Machine, and Metaphor: An Essay on Artificial Intelligence and Legal Reasoning*. Westview Press, Boulder, Colorado, 1993. 145 pp.
- Ellen Thro. *The Artificial Intelligence Dictionary*. Microtrend Books, San Marcos, California, 1991. 407 pp.
- Rob Walker. *An Expert System Architecture for Heterogeneous Domains: a Case-Study in the Legal Field*. Vrije Universiteit, Amsterdam, 1992. 385 pp.

### International Association of Artificial Intelligence and Law (IAAIL)

**President:** L. Thorne McCarty  
Department of Computer Science  
Rutgers University

**Vice President:** Marek J. Sergot  
Department of Computing  
Imperial College of Science, Technology and Medicine

**Secretary/Treasurer:** Carole D. Hafner  
College of Computer Science  
Northeastern University

*AI & Law News* is a publication of the International Association for Artificial Intelligence and Law. Correspondence concerning *AI & Law News* should be directed to Karl Branting, IAAIL Newsletter Editor, Department of Computer Science, University of Wyoming, P.O. Box 3682, Laramie, WY 82071, USA; Tel: (307) 766-4258; Fax: (307) 766-2697; Internet: karl@eolus.uwyo.edu

For information on IAAIL membership, contact Carole Hafner, College of Computer Science, Northeastern University, Boston, MA 02115, Tel: (617) 373-5116, Fax: (617) 373-5121, Internet: hafner@ccs.neu.edu

Layout and design by Susan Branting

# ICAIL-93 a Great Success ...

models for representing, reasoning, and arguing with previously decided cases. Two authors explored the potential of intelligent legal document generators — an area where commercial software already exists, but many opportunities for innovation remain. Two authors presented intelligent tutoring systems for legal problem-solving and argumentation skills. Legal expert systems were described for giving advice on insurance compensation decisions, the new (1991) income tax law of China, commercial credit application evaluation, and interpretation of building construction regulations. Other topics included legal text retrieval, expert system validation, and the potential of neural nets to provide justifications for their decisions.

There were two invited talks at the Conference: Professor Hans Crombag of the University of Maastricht delivered a talk entitled “On the Artificiality of Artificial Intelligence”, which presented a behaviorist challenge to the methodology of symbolic artificial intelligence. Professor Lothar Phillips of the University of Munich presented an invited talk entitled “Artificial Morality - a new discipline in the Natural Law Tradition” which developed a formal analysis of moral choices in cooperative and competitive situations, based on the game theory situations of the Prisoner’s Dilemma, and the game of Chicken. Professor Phillip’s talk educated many attendees to a new way of thinking about and analyzing legal rules, while Professor Crombag’s talk sparked a heated debate outside the

conference hall on the relevance of the orthodox behaviorist methodology to AI and Law research. The text of the two invited talks are published in Vol. 2, Issue 1, of the Artificial Intelligence and Law journal, which will appear in early 1994.

In addition to the scientific program, the location of the Conference in the charming and historic city of Amsterdam added greatly to the enjoyment of all. After the day’s activities, conferees could be found wandering along the canals or eating *rijsttafel* in the many excellent Indonesian restaurants. A reception in the Amsterdam Historical Museum, and an elegant banquet preceded by a canal cruise through the city of Amsterdam helped to ensure that the social aspect of the Conference were just as successful as the scientific program.

The published Proceedings of ICAIL-93, as well as previous ICAIL conferences, can be ordered from the Association for Computing Machinery (ACM). The ACM Order Numbers are 604870, 604890, 604910, and 604931 for ICAIL-87, 89, 91, and 93 respectively. Please direct inquiries to:

**ACM Order Department P.O. Box 64145  
Baltimore, Maryland Tel. 800-342-6626 or:  
410-528-4261 (outside US, and MD or AK)**

ACM also accepts Visa, Mastercard and AmEx orders by mail or by calling the numbers listed above. The cost of each Proceedings is approximately \$20 - \$25.

## Views Sought on '97 Conference

# New Officers Elected at Biannual Meeting

As provided in the IAAIL By-Laws, a meeting of the IAAIL membership was held during the 4th International Conference on Artificial Intelligence and Law. Some highlights of that meeting were:

- The Executive Committee announced its decision that the next ICAIL Conference will be held in Spring 1995 at the University of Maryland. L. Thorne McCarty will be the Conference Chair, Professor John Horty of the University of Maryland will be the Local Arrangements Chair, and Trevor Bench-Capon will be Program Chair.
- The Executive Committee is considering a proposal to hold the following ICAIL Conference in Winter 1997 in Melbourne, Australia. Members are invited to communicate their views on this proposal to members of the Executive Committee.

- Bi-annual elections were held and the following officers and committee members were elected, with terms to begin January 1, 1994:

### **Executive Committee**

President: Marek Sergot (mjs@doc.imperial.ac.uk);  
Vice-President: Edwina Rissland (rissland@cs.umass.edu);  
Secretary-Treasurer: Carole Hafner (hafner@ccs.neu.edu);  
Thomas Gordon (thomas@gmdzi.gmd.de); Graham Greenleaf (graham@lexsun.law.uts.edu.au); Ejan Mackaay (mackaay@droit.umontreal.ca); and Anja Oskamp [continuing] (oskamp@sara.nl)

### **Nominating Committee**

Chair: L. Thorne McCarty (mccarty@cs.rutgers.edu);  
Kevin Ashley [continuing]; Andrew Jones; and J. C. Smith.