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**British Columbia
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Practical Applications of Artificial Intelligence



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In cooperation with the IBEW/ECA (the Electrical Union and its Contractor Association) and Pacific Artificial Intelligence Systems Corp, BCIT is hosting an International Conference on November 6 and 7, 1990 on the *Practical Applications of Artificial Intelligence*.

Keynote Speaker

Dr. Ivan Bratko is an internationally famous teacher and writer whose books on AI have had a profound impact on the development of this technology: *Prolog Programming for Artificial Intelligence*, is a widely used university textbook; *Kardio*, develops an Expert System associated with heart problems. Dr. Bratko is on the faculty of the Jozef Stefan Institute at the University of Kardelja, Yugoslavia; but he is, at present, with Strathclyde University and the Turing Institute in Glasgow, Scotland. Dr. Bratko will speak on the Nature of Artificial Intelligence, and on his current research interests, including machine learning and qualitative modeling which have applications to control systems, troubleshooting, and the invention of new devices.

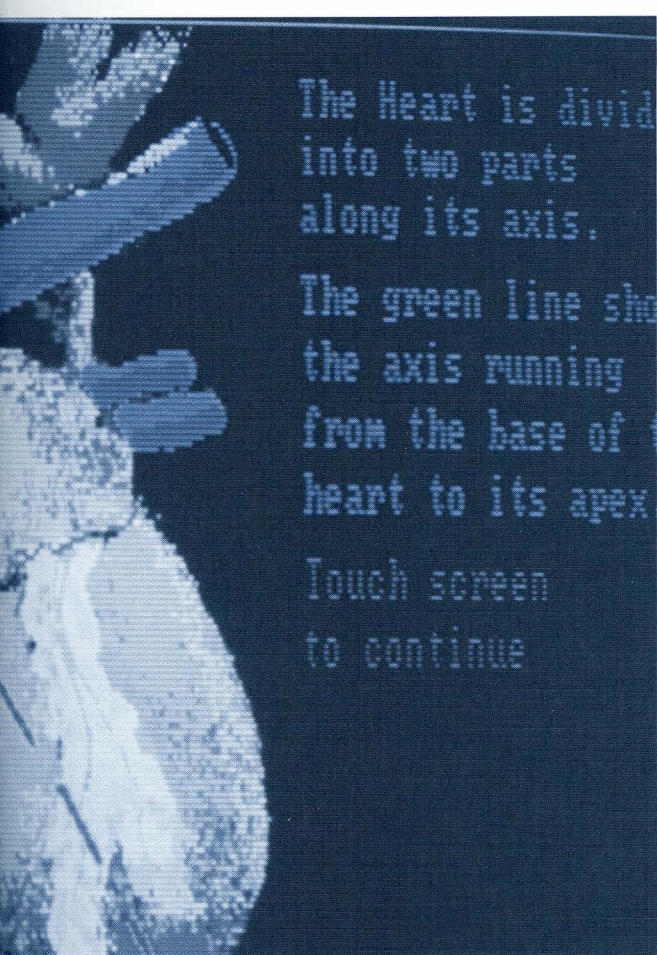
Who Should Come to this Conference?

Anyone who is curious about this exciting new technology. Activities are planned both for those with or without a background in AI. Researchers and students of Expert Systems will find the technical presentations particularly valuable, while educators will enjoy the panel discussion on AI in Education. Process engineers will find the tour of BCIT's new Advanced Industrial Control Centre worthwhile. Finally, anyone wondering how Expert System technology can be utilized to help in dealing with environmental problems will find much food for thought at the conference.



What is Artificial Intelligence?

Artificial Intelligence, or AI, is a field of computer science in which computer programs are used to solve problems normally thought to require human intelligence. When AI programs are used to solve such problems we have what is called a computer-based expert system. Expert Systems are becoming increasingly important facets of computer technology. They are now used routinely in the credit business, in manufacturing, and in medicine.



Expert Systems at BCIT

For the past several years, BCIT has worked with the IBEW/ECA and Pacific AI on the development of Expert Systems for advanced industrial education. In a project with Prince George Pulp and Paper Mills, we developed an Expert System for managing information in distributed control systems, which advises operators when alarms sound and indicates possible problems. BCIT and Pacific AI are working on an Expert System which, from a computerized model of the human heart, can detect heart problems and recommend appropriate treatments. In cooperation with the Municipality of Burnaby, we have developed a pilot Expert System which can advise residents on 'environmentally green' alternatives to the use of common household pesticides. These projects, and much more, will be presented at the conference.

The Program

Tuesday, November 6

9:00 - 9:30

Opening Remarks

9:30 - 10:00

Applied Research at BCIT

- Dr. Norman Streat, Ph.

10:15 - 11:45

Introduction to Artificial Intelligence and Expert Systems Technology

- Dr. Ivan Bratko

11:45 - 12:30

Lunch

12:45 - 1:15

Expert Systems and the Environment

- Drug Svetic and Dr. Jeffrey Skosnik

1:30 - 2:15

Hewlett Packard Presentation:

Environmental Applications of Artificial Intelligence

2:30 - 3:30

Natural Language Interface to AI Systems

- Dr. Veronica Dahl

(Simon Fraser University)

3:45 - 5:00

AI in Education: Panel Discussion

7:00 - 9:00

Campus Tours and Expert Systems

Demonstrations

Wednesday, November 7

10:00 - 11:15

Machine Learning and Qualitative Modelling: Industrial Applications

- Dr. Ivan Bratko

11:30 - 12:00

A Real-time Expert System for Process Control

- Peter Kay

12:00 - 12:45

Lunch

1:00 - 1:30

Pacific AI/BCIT Joint Research Projects

- Margarete Floeck and Dr. Tom Stokes

1:30 - 2:00

Expert Systems and Pest Management

- Claudine Matteau and Arthur Stock

2:15 - 4:30

Campus Tours and Expert Systems

Demonstrations

Acknowledgements

To the **Federal Government's CEIC Innovations Program** for its financial support of our project work with the IBEW/ECA.

To the **Provincial Government's STDF Program** for its financial support of our project work with Prince George Pulp and Paper Mills.

To the **IBEW/ECA** for its donation of hardware for our project work.

To the **members of the IBEW** who contributed their labour in the construction of our Process Laboratory.

To **Xycom Computers** for the donation of industrial computers.

To **Allen Bradley** for the donation of industrial equipment.

To **DynaPro** for the donation of industrial software.

To **Pacific AI** for providing the honorium for our distinguished guest speakers.

To **Prince George Pulp and Paper Mills** for its participation in our STDF project.

To **Hewlett Packard** for the donation of computer workstations for the continuation of our research into Expert Systems technology and the environment.

To the **Municipality of Burnaby** for its financial support of our Expert System work with the environment.

To all of these companies, government agencies, and organizations, we are deeply grateful.

Campus Tours & Demonstrations

The same campus tours and demonstrations are scheduled at different times Tuesday and Wednesday in order to permit everyone an opportunity to see BCIT's new Advanced Industrial Control Centre and the projects in which the Institute is involved. On the Registration form, please indicate which time and day you would like to have your tour; select one.

Registration Options

You may register just for Dr. Bratko's presentation on the Nature of Artificial Intelligence and attend the campus tour at a cost of \$25. The campus tour will give you an opportunity to see the Expert System being developed with Burnaby on 'green' alternatives to household pesticides. Students and Senior Citizens may register for the full two days for \$50, or \$30 for one day of attendance.

Regular registration fees are \$195 for two days; \$100 for one day.

Location:

Electrical Training Centre Auditorium
BCIT
3700 Willingdon Avenue
Burnaby, B.C.
Canada
V5G 3H2

**PRACTICAL
APPLICATIONS
OF
ARTIFICIAL
INTELLIGENCE**

**BCIT
Electrical Training Centre
(ETC) Auditorium**
3700 Willingdon Avenue
Burnaby, B.C., Canada V5G 3H2

November 6-7, 1990

Return to:

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Sex <input type="checkbox"/> Male <input type="checkbox"/> Female		Country of Citizenship		
Mailing Address: Number and Street				
City/Town		Prov.	Country	
Company Name		Company Phone Number		
Your Job Title		Home Phone Number		
COURSE REGISTRATION				
COURSE NUMBER	COURSE TITLE	COURSE COST(S)		START DATE
		FEE		
T C T R 9 0 0	Practical Applications of Artificial Intelligence	\$195		November 6 & 7
		\$100		1 day only
		Students and Seniors \$50		November 6 & 7
		Students and Seniors \$30		1 day only
		Lecture by Dr. Bratko & Tour \$25		<input type="checkbox"/> November 6
		Lecture by Dr. Bratko & Tour \$25		<input type="checkbox"/> November 7
		TOTAL FEES		
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<input type="checkbox"/> MasterCard		Expiry Date:		\$
Signature: _____		Month Year		
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