



AiCE 2000
CANBERRA

**SECOND AUSTRALIAN INSTITUTE OF
COMPUTER ETHICS CONFERENCE**

Computer Ethics: Why Bother?

Conference proceedings

Edited by

John Barlow and Matthew Warren

ISBN 0-9578543-0-7

Welcome

The AiCE2000 conference follows on from the highly successful initial AICEC99 conference. This conference looks at the continued development of Computer Ethics within Australia, papers covering issues such as: the teaching of computer ethics, security and ethics; the impact of computer ethics and the role of organizations such as the UN in helping to develop ethics including computer ethics.

Members of the conference review committee accepted each paper in the proceedings after a careful review; this took the form of a blind review by at least two members of the conference review workshop. The papers were subsequently reviewed and developed where appropriate; taking into accounts the comments of the reviewers.

The aim of this conference is to further the work already achieved within Australia and bring together researchers in the field to discuss the latest issues and their implications upon Australia with the start of the new millennium.

We commend the authors for their hard work and sharing their results, and the reviewers of the conference for producing an excellent program.

AiCE 2000 Reviewers

Jo Coldwell	Deakin University
Oliver Burmeister	Swinburne University
Chris Simpson	Swinburne University
Matt Warren	Deakin University
John Weckert	Charles Sturt University
John Barlow	Australian Catholic University
Bill Hutchinson	Edith Cowan University
Craig McDonald	Canberra University.
Graham Altmann	Deakin University
Shona Warren	Deakin University
Angela Scollary	Victoria University
Marie Van der Klooste	Deakin University

AiCE 2000 Organising Committee

John Barlow, Chair
Craig McDonald
Matthew Warren
John Weckert

AiCE 2000 acknowledges the support of:

Australian Catholic University
Charles Sturt University

Computer Ethics: Why Bother?

John Weckert

Together with many opportunities for improving the quality of life, a host of ethical problems have merged with the widespread development and introduction of computer technology, and in particular, the Internet. Worries have arisen about privacy, intellectual property, censorship, responsibility and accountability for systems, the surveillance and monitoring many activities, human relationships, research directions, particular in artificial intelligence, and many more. While most of these worries arise in other fields as well, they are legitimately part of computer ethics insofar as they occur in the computing context in often unique ways, and in that context require answers which are sensitive to the technology. There is little point in advocating a solution to a problem if that solution is not technically possible. This challenge of computer ethics has led to considerable activity in the field, including regular conferences and the establishment of centres, including the Australian Institute of Computer Ethics, and the computer ethics programme of the recently established ARC Special Research Centre of Applied Philosophy and Public ethics dedicated to its study.

Like all applied ethics, there is a wide range of approaches to the study of computer ethics. It is of vital importance that computer professionals have an understanding of the issues, and incorporate this understanding into their professional work. It is of no less importance that policy makers, in professional bodies such as the Australian Computer Society, in government, and elsewhere, understand the ethical problems of the impact of computer technology on the lives of people. This professional and applied strand must be underpinned by a philosophical examination which builds on the long history of the study of ethics if it is to have a rigorous and theoretical foundation. AiCE2000 is part of a continuing effort to highlight important questions and problems, and by providing a forum for professionals of diverse backgrounds to meet, to assist in the task of finding solutions. There are important problems to be solved, and that is why it is worth bothering with computer ethics, and with conferences such as this!

AiCE2000 - Programme

Saturday 11 November

8:30 Coffee and Registrations

- 9:30** Welcome from the Chair: John Barlow
Opening Address : Senator Kate Lundy
- 10:00** Keynote Address: Professor Jeroen Van Den Hoven

11:00 Morning Tea

11:30 Strand 1

- Carolyn Dowling Intelligent agents: Some ethical issues and dilemmas
K. Wahlstrom & J. Roddick On the impact of knowledge discovery and data mining
P. Anderson, J. Grant & R. Chan The discourse of artificial intelligence: An ethical critique

11:30 Strand 2

- C. Simpson IT takes more than ethics
M. Williams Ethics in information systems research
J. Weckert IT Research and Development: should there be control?

1:00 Lunch

2:00 Strand 1

- J. Ratcliffe Mapping crime on the Internet: public service or litigious nightmare?
M. Warren & W. Hutchinson Information warfare and security ethics
M. Enders & L. Enders Cops, computers and the right to privacy in the information age: Unauthorised access and inappropriate disclosure of information complaints in New South Wales

2:00 Strand 2

- E. Spence Cosmopolitanism and the internet
J. Coldwell It is possible to teach computer ethics via distance education!
A. Meyenn The use of computers in schools: some ethical issues

3:30 Afternoon Tea

4:00 Strand 1

- P. Melser Corporate voices, personal voices: The ethics of Internet communication
- O. Burmeister HCI professionalism: Ethical concerns in usability engineering
- A. Corbo Crehan Mabo-style claims to the Radio Spectrum

4:00 Strand 2

- P. Roberts Protecting the participant in the contested private/public terrain of Internet research: Can computer ethics make a difference?
- A. Alexandra Authorship and the unstable text
- J. Webber & P. Roberts Putting 'Hackers' to work on improving system security: 'Sleeping With The Enemy', or a vision of a new computer ethics?

5:30 Wine & Cheese from Charles Sturt University

Sunday 12 November

9:00 Strand 1

- M. Warren & S. Warren The role of ethics in electronic commerce
- O. Burmeister Usability testing: revisiting informed consent procedures for testing internet sites
- B. Godfey Electronic work monitoring: An ethical model

9:00 Strand 2

- T. Benesch Does an internet identity exist?
- A. Jawary Masks, internet and identity
- R. Lucas Why Bother? Ethical Computers – That's Why!

10:30 Morning Tea

11:00 Strand 1

- D. Ardagh Public education and training in computer usage: An ethico-political rationale
- G. Acquah-Gaisie & S. Johnston Bridging the digital divide in Oceania: development via the Net

11:00 Strand 2

- G. Sandy The Online Services Bill: Theories and evidence of pornographic harm
- D. Blackman & M. Leake Towards a Universal World of Computer Ethics

12:00 Closing Address

Professor Michael Wagner,
Chair, Committee for Ethics in Human Research, University of
Canberra

Intelligent agents: some ethical issues and dilemmas

Carolyn Dowling

Not so long ago intelligent software agents belonged in the realms of speculation and esoteric research. Today, while we may not always be aware of it, they are an important part of our everyday lives online. Implicit in our understandings of agency is the notion of delegation. Important aspects of this concept both in the real world and online, are autonomy, trust and responsibility. This paper explores some of the ethical considerations arising from these and other aspects of the widespread implementation of intelligent agents within online environments.

Carolyn Dowling is an Associate Professor and Head of the School of Arts and Sciences (Victoria) at Australian Catholic University. Prior to becoming a university academic in the area of computing and information technology she worked as a high school teacher of English Literature, French and Mathematics, then for a number of years as a freelance writer. Her teaching and research interests have focussed at different times on a range of HCI issues, social and ethical aspects of computing, Logo, virtual reality in education and training, software agents, computer mediated writing and aspects of Internet use.

On the Impact of Knowledge Discovery and Data Mining

Kirsten Wahlstrom & John F. Roddick

Knowledge Discovery and Data Mining are powerful automated data analysis tools and they are predicted to become the most frequently used analytical tools in the near future. The rapid dissemination of these technologies calls for an urgent examination of their social impact. This paper identifies social issues arising from Knowledge Discovery (KD) and Data Mining (DM). An overview of these technologies is presented, followed by a detailed discussion of each issue. The paper's intention is to primarily illustrate the cultural context of each issue and, secondly, to describe the impact of KD and DM in each case. Existing solutions specific to each issue are identified and examined for feasibility and effectiveness, and a solution that provides a suitably contextually sensitive means for gathering and analysing sensitive data is proposed and briefly outlined. The paper concludes with a discussion of topics for further consideration.

Kirsten Wahlstrom is a lecturer in the School of Computer and Information Science at the University of South Australia. She is the current leader of the School of Computer and Information Science's Equity team, and coordinates the Information Technology Bridging Program. Current teaching responsibilities include Software Engineering and Computer Ethics. She holds a BComp&InfoSc from the University of South Australia, her recent publications include *On the Ethics of Data Mining* and *Fragmentation of Multidimensional Databases*. Her primary research interest is Computer Ethics and she is currently completing an honours degree in the School of Informatics and Engineering at the Flinders University of South Australia. Her goal is to provide ongoing critical assessment of the cultural impacts of emerging Information Technologies.

John F. Roddick currently holds the SACITT Chair of Information Technology in the School of Informatics and Engineering at the Flinders University of South Australia. Prior to joining Flinders University earlier this year, he held positions at the Universities of South Australia and Tasmania, and as a project leader and consultant in the Information Technology industry. His technical interests include data mining and knowledge discovery, schema versioning and enterprise systems. He holds a PhD from La Trobe University, an MSc from Deakin University and a BSc (Eng)(Hons) from Imperial College, London. He is editor-in-chief of the *Journal of Research and Practice in Information Technology*, a fellow of the Australian Computer Society and the Institution of Engineers, Australia and a member of the IEEE Computer Society and the Association for Computing Machinery.

The Discourse of Artificial Intelligence: An Ethical Critique

Peter Anderson, Jennifer Grant & Ringo Chan

Any conception that the functions proper to a rational and so conscious human person can be reproduced by a suitably programmed computer is shown to be based on a mechanistic metaphysics developed from a misapplication of the mathematical models of 17th century Newtonian physics. The language used in Artificial Intelligence discourse and certain claims arising therefrom suggest that a mechanistic model of the human person is tenable. Such an understanding of the human person provides no stable basis for a theory of ethics. Modern physics, however, draws attention to the radical inadequacy of mechanism, even in science. Cogent arguments, confirmed by experience, will be presented to demonstrate that human reasoning takes place with a form of knowing not possessed by computational reasoning. Further the human person not only knows, but knows that she knows, and this is a basis for human consciousness. An holistic conception of the human person arising from the special form of human consciousness will be presented. The human person possesses a unique dignity, given expression in the way persons matter to one another, and protected by an objective and discoverable ethics.

IT Takes More Than Ethics

Chris R. Simpson

Recent positive developments in ethical outlook are explored, initially within the Information and Communication Technology (ICT) profession, and then broadened into other disciplines and the community in general. To understand why there has been a growing ethical problem in the first place, ethical attitudes of university students, ICT exponents and people in other disciplines have been observed and noted. The search for practical ethical guidelines continues by questioning why, if professionalism indicates an adherence to a code of ethics that seeks high standards, do we still have trouble with the concept of ethics? Ethics differ from one group to another. Furthermore, ethics keep changing, as is evident in the latest codes, in which 'public good' now comes before the more inward-looking 'good of the profession'.

As Co-director of the Australian Institute of Computer Ethics (AICE), Chris Simpson is actively promoting in the community an awareness of the broader ethical issues and higher ideals of a rapidly expanding Information and Technological era. He is addressing these issues through his lectureship in the School of Information technology at Swinburne University of Technology in Melbourne, by virtue of teaching computer ethics to undergraduates in computer science and software engineering, and also through AICE activities such as conferences, public seminars, research seminars and discussion fora. Having obtained an electrical engineering degree at Melbourne University in 1965, Chris began an unusual journey into computing via Antarctica, UK and Australia, serving under several manufacturers and then consulting solo in software engineering. He came to Swinburne and academic teaching in 1989, bringing industrial experience and a pragmatic, human approach to electrical engineers and computer scientists. He and Dr. John Weckert of Charles Sturt University founded AICE in February 1998 in response to the perceived need in Australia to emulate the work of similar established centres in UK and USA. He seeks to continue to expand practical ethics education and cooperative work with other ethical and professional bodies and universities.

Ethics in Information Systems Research

Mark Williams

In order to reflect on some ethical improprieties which I had committed during the data collection phase of an information systems research study, I conducted an heuristic and psychologically-oriented self-study. As part of this heuristic reflection, I engaged in a number of self dialogues in the form of a conversation between various characters. Reported in this paper is one of these dialogues, concerning broad issues of ethics and research and discussing the notion of wisdom, maturity, meaning, and virtue. Ethical considerations are always of primary importance, and I would assert that this is even more so

when considering research investigating and using new media, such as the world wide web, in which acceptable ethical practices have yet to be established and consolidated.

Prior to nine years lecturing in management information systems and business computing at Edith Cowan University, Mark achieved a diverse academic and industry background. After working in the architecture and building industry (with bachelors degree in science and also in architecture (honours)), Mark achieved post graduate qualifications in education and in computing, lecturing in tertiary, secondary and technical education. Mark then took up a post as computing consulting and trainer with the government of Kiribati, returning after three years to start a consulting business in Australia. His research interests are in the use of systems approaches in information systems consulting and education, the self-study of university teaching practice, human technology interaction, symbolic analysis, and reflective practice. Mark likes to work with his students in reporting on future trends and on soft systems analyses of business case studies.

IT Research and Development: should there be control?

John Weckert

Two views are prevalent with respect to suitable topics for scientific research. One, typically held by researchers, is that any topic of research is fair game for the researcher. The result of research is knowledge, and knowledge in itself is neither good nor bad, therefore there can be no *moral* reasons for restricting research in any area. The proviso of course is that the research is undertaken in an appropriate manner. The other view is that science, even pure science, should serve the needs of the broader society, and therefore the society should have a say in what scientific research is conducted. Some should be avoided or even forbidden because it is harmful or will most likely be put to some harmful uses, because it is useless and therefore a waste of public assets, or because other research is more important. This debate rests on a tangled web of theories, reasoning and assumptions. This paper will explore some of these underlying issues and examine the responsibilities of professional researchers, with particular reference to research in artificial intelligence.

Mapping crime on the Internet: public service or litigious nightmare?

J. Ratcliffe

Information Warfare and Ethics

M.J.Warren & W.Hutchinson

This paper examines the ethics of the practice of information warfare at both the national and corporate levels. Initially examining the present and past actions of individual hackers, it moves to the more organised, future military and economic warfare scenarios. It examines the lack of legal or policy initiatives in this area.

Cops, computers, and the right to privacy in the information age: unauthorised access and inappropriate disclosure of information complaints in New South Wales

Mike Enders & Lily Enders

The term the 'information age' is particularly applicable to Australia. In a recent email, the Australian Institute of Criminology's Chief Librarian, John Myrtle, passed on statistics which showed that internet use and access in Australia has increased about 50% during the last year (Pers. Comm. 14 July 1999). Of greater interest is the fact that almost 20% of Australian households, 1.3 million, have internet access and over one third of the adult population has accessed the internet at some time during the year

ending February 1999. To further back these figures, the *Sydney Morning Herald* of 12 February, 2000, carried statistics from the Australian Bureau of Statistics which showed that 22.6% of Australian families had home internet access (Anon., 2000a, p. 105). These figures firmly place Australians among the world's most computer literate societies.

Mike Enders is currently an Investigator with the Independent Commission Against Corruption (NSW). He is on Leave Without Pay from his position as a lecturer in policing studies at Charles Sturt University's School of Policing Studies. Prior to his University appointment he was a Queensland police officer. Mike was involved in the implementation of the Qld Police Service's Crime Reporting and Information System for Police (CRISP) and personally trained several hundred officers to use the system in an efficient and ethical manner.

Lily Enders is the Senior Investigator (Police) in the NSW Ombudsman's Category 1 Team (Corruption & Serious Misconduct). Lily has overviewed numerous investigations of unlawful computer access. Lily is a former Queensland police officer and prior to joining the Ombudsman's Office was Senior Sergeant in charge of the South Brisbane District Inquiry Office. She was responsible for improving access to external computer records for police in her office and was a member of the Polaris Committee which reviewed and updated the QPS IT systems.

Authorship and the Unstable Text

Andrew Alexandra

Recent literary theory has emphasised what might be called the autonomy of the text – the way in which it breaks free of the context of its creation and hence the author's intentions. . The development of electronic publication and the internet appear to further problematise the notions of authorship, since electronic texts are inherently unstable – they can undergo continuous change as they pass through various hands. In the light of these developments should we conclude that the author is indeed dead, as claimed by the postmodernists? In this paper I argue that while electronic publication will indeed have profound transforming effects on our understanding of authorship, reflection on the history of textual practices and the nature of the technology indicate that the author is likely to survive.

Corporate voices, Personal voices: The ethics of Internet communication

Peter Melser

Two distinct discourses are competing for dominance of the Internet. Each of these "voices" identifies different ethical issues as being the key ones. The Corporate voice of press releases and official company statements makes the legal enforcement of property rights a key issue. Advocates of the "personal voice" of e-mails and chat rooms make freedom of expression and personal conversation more important. The paper compares these contesting ethical visions for the Internet. Neither voice makes a serious issue of "privacy of personal information", a key concern of a more "humanist" intellectual tradition associated with public institutions. The issue is more the relationships and relative strengths of these discourses. "Ethical conversations" are one way in which the personal voice can be strengthened within organisations.

Dr Peter Melser is Director of Changeworks Pty Ltd, an organisation which conducts social and organisational research and conflict mediation, with a focus on the Internet

Protecting the participant in the contested private/public terrain of Internet research: Can computer ethics make a difference?

Paula Roberts

On-line discussion groups offer a rich repository of data for social scientists, and this is reflected in a rapid expansion of Internet research. However, the protection and rights of subjects in this new research arena have received scant attention, and there are reports of cyber-research projects which have gone ethically awry. Such incidents reveal the limitations of existing human research ethics codes for Internet research and they highlight the blurred distinctions between the private and the public in the study of on-line communities. These projects show also that the exercise of a well-developed ethical judgement by individual Internet researchers is imperative if their participants' privacy and well-being is to be protected. Whilst existing codes of practice for research with human subjects may well be amended and extended to meet the special challenges of cyber-research, the matter of what is private or public data may well depend on a 'bottom-up' ethical wisdom built upon concrete cases, rather than a 'top-down' application of universal principles.

Paula Roberts is a lecturer in the School of Communication and Information Studies at the University of South Australia where she teaches graphic design subjects in the Multimedia major of the B.A. (Communication) award. In addition she teaches social informatics and computer ethics in an integrated first year computing subject. Paula is a member of the University of South Australia's Human Research Ethics Committee.

Putting 'hackers' to work on improving system security: 'sleeping with the enemy', or a vision of a new computer ethics?

Jenny Webber & Paula Roberts

It is estimated that losses due to computer break-ins by malicious 'crackers' (either external intruders or disgruntled employees intent on personal gain or revenge) are costing companies billions of dollars each year. But former hackers are now assisting the computer security industry to track down such intruders, and to develop sound security practices in order to ward off future attacks. It is argued that in recent times computer programming has moved from a craft-based bricolage to a scientific approach which has led to a knowledge gap developing between the former fraternity of hackers and the computer security industry. The current inadequacies of the security industry have made this co-operation with hackers necessary but the liaison raises ethical issues of whether hackers who have developed their skill by breaking into company and government systems should now be used for the rightful purposes of strengthening computer security. It also raises the question of whether the hacker ethos which has developed from the craft of a 'community of practice', and has as its cornerstone the moral custodianship of computers and the information they contain, is the best way of developing ethical practice in the computer industry.

Jenny Webber and Paula Roberts are lecturers in the School of Communication and Information Studies at the University of South Australia where they teach graphic design subjects in the Multimedia major of the B.A. (Communication) award. In addition they teach social informatics and computer ethics in an integrated first year computing subject.

HCI Professionalism: Ethical concerns in Usability Engineering

Oliver K. Burmeister

It has been argued that it is in the best interests of IT professionals, to adopt and enforce professional codes in the work place. Yet applying the Australian Computer Society's Code of Ethics in actual

every day situations has been left to individuals. This paper aims to help usability engineers interpret the code. This is achieved by utilising five case studies both directly in terms of the ethical issues involved and in the light of the code. The paper also examines the short-comings of the code in the domain of usability engineering. The paper concludes with suggestions of how the code might be enhanced to better aid the HCI professional in their work.

Oliver K. Burmeister is a lecturer in the School of Information Technology at Swinburne University Of Technology. His research interests focus on Human Factors in IT. He was a founding member of the Australian Institute of Computer Ethics and is currently completing a Master of Information Technology specialising in Human-Computer Interaction.

Mabo-Style Claims to the Radio Spectrum

Anna Corbo Crehan

The Federal Government plans to auction third-generation resources later this year, and it has been suggested that indigenous Australians may be able to make a successful Mabo-style claim to the radio spectrum. In this paper, I will explore some of the issues that such a claim would need to address, and demonstrate the difficulty involved in resolving those issues. My argument will be that the discovery and development of new technologies such as the radio spectrum brings to the fore inadequacies in current approaches to (and understandings of) native title in Australia. We cannot fully address issues of native title unless and until we can find a way of understanding such title which is responsive to technological developments.

Does an Internet Identity Exist?

Thomas Benesch

A questionnaire, i.e. an email was sent to newsgroups, which refers to a WWW site, on which the questionnaire is about the European parliament elections in party-oriented newsgroups were executed. Since 26 May 1999 up to the European parliamentary election we have received 49 responses. A social environment is anywhere where people interact with each other. In such environments people are constantly exchanging cues and social information, observing the appearance and behavior of others. These observations and exchanges help us to make sense of the surrounding social world. The on-line world and its inhabitants are without solid physical presence. Such an environment brings very different freedoms --and limitations--to the on-line social world. In the physical world there is an inherent unity to the self, because body provides a compelling and convenient definition of identity. The virtual world is different. It is composed of information rather than matter. Information spreads and diffuses; there is no law of the conservation of information. The cost of identity deception to the information-seeking reader is potentially high. Misinformation, from poor nutritional advice to erroneous interpretations is easy to find on the net--and it is more likely to be believed when offered by one who is perceived to be an expert. Whatever information the seeker finds, it will assumed to be adequate enough. Even if good information can be had on the Internet for a particular problem, it is not clear that seekers comprehend and evaluate it correctly, especially given its decontextualized nature.

Masks, internet and identity

Anita Jawary

This paper examines the use of mask in education in terms of the cultural and symbolic significance of mask and the performance metaphor. It specifically examines the use and ethical implications of the mask in online and distributed learning environments. How do the masked identities of teacher and learner affect interaction and learning?

Why Bother? Ethical Computers – That’s Why!

Richard Lucas

If the AI enthusiasts are right and computers can think and Picard right when she claims that computers will have emotions, then it seems that, in principle at least, computers could be ethical. If this is true then attention ought to be paid to the sorts of ethics a computer might have and what *that* might mean. The subject of this paper is the possible ethics of computers. That is, If computers were capable of being ethical, of what kind of ethics would it be and what might *that* mean?

Richard Lucas lectures in Computing Studies (Systems Analysis, Professional Ethics, and supervise the final year project) at the Canberra Institute of Technology and also currently enrolled in the Information Technology Masters program at the University of Canberra where his thesis topic is Limitations of Human-Computer Interfaces: Conceptions and Misconceptions of Information. My research interests are; the relationship of computers and people, information and knowledge, ethical theory as applied to information, computers, and people, and theory and application of systems analysis.

The Issues of Ethics in Electronic Commerce

S. Warren & M.J. Warren

Ethics is an important element in all aspects of computing, but proves to be a real problem in the development and delivery of electronic commerce systems. There are many aspects of ethics that can affect electronic commerce systems, but perhaps the most notable and worrying to both consumers and developers is that of trust.

In a world where so much information is transmitted and shared electronically, ethical standards that in general society are applied to this medium, are often ignored or forgotten. This paper will discuss some of the ethical considerations that should be considered in electronic commerce and offer the possible solutions that can encourage developers to consider ethical considerations and prove excellence and trust to the consumer.

Usability Testing: Revisiting Informed Consent procedures for testing Internet sites

Oliver K. Burmeister

This paper explores issues of professional, ethical conduct in usability testing centering around the concept of ‘informed consent’. Previous work on informed consent has been in homogeneous geographic locations. With Internet sites being developed at a prodigious rate, these procedures need to be revisited for their applicability to heterogeneous locations, in terms of culture, business practice, language and legal requirements. Some previously valued principles might now be considered discretionary, that is their applicability has situational specificity. Other principles are mandatory.

Electronic Work Monitoring: An Ethical Model

Robert Godfrey

This paper describes the activity of electronic work-monitoring, the use of information technology to record the activities of workers as a background task to normal activities. The viewpoint of the activity from the employer side, as a productivity tool, and the view from the employee perspective, as a possible invasion of privacy, are compared. A quadrant model is described which combines these two conflicting viewpoints, and details how the model may be used to describe and if possible resolve potential conflicts of interest between employees and employers.

Robert Godfrey started in computing in 1958 in the UK, mostly working with ICL. He arrived in South Australia 1971 (with ICL) and switched to academia in 1973 at S.A.I.T. (now Univ. of SA), then moved to Tasmania (Univ of Tasmania) in 1988. Member BCS 1965-1971, and ACS since 1971 to date. Former Chairman, ACS(Tas) branch. ACS membership examiner in Data Management since 1987. Also member of Association of Information Systems and International Resource Management Association. Research interests include electronic service delivery, community informatics and professional ethics.

Public Education and Training In Computer Usage: An Ethico-Political Rationale

David Ardagh

Public education and training funding by states is being severely cut in many areas. Public educational providers are being forced to compete against each other for dwindling funds. Private providers are encouraged to tender competitively for them. It may be useful to revisit the general rationale for public education and training. From an ethical standpoint, education /training would seem to be one of the very highest socio-political priorities after health and security, and one whose disposition is least suitably entrusted to competitive market forces either as regards the quantum of money allocated; or as regards determining the selection of providers /tenderers; or for the assessing of the worth of the outcomes.

It is possible to teach computer ethics via distance education!

Jo Coldwell

The Australian Computer Society (ACS) has mandated, through their core body of knowledge, that computer ethics and professional responsibility should be included in information technology study programmes. However, quite naturally, the ACS do not provide any direction as to how such content should be imparted to students. Many different models are used to good effect. In this paper I describe the framework in which computer ethics is taught in the Bachelor of Computing at Deakin University. This programme is offered in both on- and off-campus mode. I will discuss the innovations that have been incorporated to accommodate the special requirements of distance education students and demonstrate that it is possible to teach computer ethics without face-to-face contact with students.

Dr Jo Coldwell is a senior lecturer in information systems in the School of Computing and Mathematics, Deakin University. She is involved in teaching a variety of subjects ranging from an introductory IT unit, communication skills, programming, database to the final year capstone unit on professional ethics. Her research interests lie in electronic commerce, security and trust, and computer literacy. She is particularly interested in the special needs of electronic teaching and learning, an area of increasing importance and need at Deakin University.

The use of computers in schools: some ethical issues

Andrew Meyenn

The Online Services Bill: Theories and Evidence of Pornographic Harm

Geoffrey A Sandy

On the 1 January 2000, the Broadcasting Services Amendment (Online Services) Bill 1999 came into force. It aims to censor online what is currently censored offline. Information Technology Professionals should be concerned about censorship of the internet both in their capacity as a member of the profession and as a citizen. The Bill is mainly aimed at pornographic content, and how a society treats it is a good test of its openness. The paper addresses the primary research question - "Is censorship of internet pornography justified?" Five theories about pornographic harm are distilled from an analysis of a multi-disciplinary literature, including the parliamentary debates on the Bill, and the hearings of the Senate Select Committee on Information Technologies. The research findings on pornographic harm are also summarised. The conclusion of the analysis is that censorship of internet pornography by the Australian Government is not justified on three grounds. First, suppressing speech that is offensive to some members of society, even the majority, is inconsistent with free speech that characterises an open society. Second, the research findings do not support the view that pornography directly causes harm. Third, pornography may confer positive societal benefits for both men and woman.

Dr Geoff Sandy is a senior lecturer of the School of Information Systems at Victoria University. He holds a Commerce Degree, Masters in Economics and Diploma in Education from Melbourne University. He also holds a Graduate Diploma in Commercial Data Processing from Footscray Institute of Technology (FIT) (a predecessor institution of Victoria University) and a Doctor of Philosophy in Computer Science from RMIT. In addition he holds a Certificate of Theology from Moore College (Sydney University).

Geoff has taught, researched and consulted as an Economist whilst at FIT from 1973 to 1989. In 1989 he joined the ANZ Banking Group as a Systems Planner. He managed the systems planning group for the Institutional Financial Services Division of the Bank. In 1992 he re-joined Victoria University in the School of Information Systems.

His major undergraduate teaching is in the area of Systems Analysis and in the postgraduate areas of Systems Development and Management of Information Technology. He supervises honours and Ph D students. His current research interests are in the area of Computer Ethics, specifically Codes of Practice for Network Use and Censorship of the Internet. Currently he performs the role as Deputy Head of School and Research Director of the School.

Cosmopolitanism and the Internet

Edward Spence

Towards a Universal World of Computer Ethics

Daniel Blackman & Mark Leake

In order to create a code of ethics that is truly universal, we need to consider people's values from all different walks of life. We can do this by identifying how different people groups view ethics and where their morals differ. Differences in people groups can be based upon a number of factors, including easily categorised factors like race, nationality, religion, gender, age and disability; or factors that are more difficult to categorise, such as upbringing, socialisation and communication. Despite the large number of differences brought about by these factors, consensus on certain values is still thought to be obtainable. These shared values provide a building block on which we can establish a universal convention for the ethical use of computer technology.

Danny Blackman is currently a 3rd year undergraduate student studying Bachelor Software Engineering at Swinburne University, Hawthorn. He also works for a firm called Plastic Software Design where he is learning the traits of a System Security Analyst and Software Developer in a real life situation.

Danny enjoys his work in Software Development and although with much to learn he believes that Computer Ethics and morality are outstanding requirements for Information Technology professionals. He first became involved with AICE when he contacted Chris Simpson who has shown outstanding support for Danny and his professional outlook towards Computer Ethics. This is Danny's first submission to a conference.

Mark Leake has a Bachelor degree in Applied Science (Computer Science and Psychology) from Swinburne University of Technology, Lilydale, and works as a programmer for a large retailing company. His interest in 'computer' ethics covers mainly the broad area of the Internet, and includes some involvement with AICE.

Bridging the digital divide in Oceania: development via the Net

Gerald Acquaaah-Gaisie and Stanley Johnston

The Internet's reach is global, but Net access is far from global; and as the IT caravan rolls on, stragglers slip further behind. However, that metaphor fails, for the Net is a cheap power just made for isolated people, and thus offers unprecedented equality. Equity here raises questions of computer ethics, human rights, good business, and development aid. Estonia has taken two great steps: first, a computer for every twenty pupils; and now a guarantee of Net access to every citizen. That is a model for isolated South Pacific islands.

Dr Gerald Acquaaah-Gaisie, originally from Ghana, is now a citizen of Australia. He was formerly the Director of Ghana Prisons Service. He is a barrister and solicitor and teaches business law, corporate crime, and information technology law at Monash University in Victoria, Australia. He is a member of the Australia-Southern Africa Business Council, and the Police Community Consultative Council in Gippsland, Victoria, Australia.

Associate Professor S.W. Johnston, Principal Fellow in Criminology at the University of Melbourne, is the Patron of the Australian Institute of Computer Ethics. He is a barrister. He was Head of Criminology at Melbourne for 21 years (introducing its postgraduate diploma), Adviser to the Australian Mission to the UN in New York, Australian correspondent to the UN Section of Social Defence, founding editor *UNAA Policy Book*, Associate and Visiting Fellow at Monash University police studies, Visiting Fellow at Leicester University politics, Fulbright Scholar, Fellow of the Australian College of Education, president Australian & New Zealand Society of Criminology, chairman Victoria's social welfare training council, president Baltara special school council, and president Howard League for Penal Reform. He is a life member of the World Society of Victimology and of the International Society of Criminology. He has published many papers, and given evidence to many Australian parliamentary inquiries.