

ENCYCLOPEDIA OF

INFORMATION ETHICS AND SECURITY



MARIAN QUIGLEY

Contents

3D Avatars and Collaborative Virtual Environments / <i>Koon-Ying Raymond Li, James Sofra, and Mark Power</i>	1
Access Control for Healthcare / <i>Yifeng Shen</i>	7
Advertising in the Networked Environment / <i>Savvas Papagiannidis and Michael Bourlakis</i>	15
Anonymous Peer-to-Peer Systems / <i>Wenbing Zhao</i>	23
Argumentation and Computing / <i>Ephraim Nissan</i>	30
Argumentation with Wigmore Charts and Computing / <i>Ephraim Nissan</i>	36
Artificial Intelligence Tools for Handling Legal Evidence / <i>Ephraim Nissan</i>	42
Barriers Facing African American Women in Technology / <i>Jianxia Du, George H. Pate, Deneen Sherrod, and Wei-Chieh Yu</i>	49
B-POS Secure Mobile Payment System / <i>Antonio Grillo, Alessandro Lentini, and Gianluigi Me</i>	55
Building Secure and Dependable Information Systems / <i>Wenbing Zhao</i>	62
Classifying Articles in Information Ethics and Security / <i>Zack Jourdan, R. Kelly Rainer Jr., and Thomas E. Marshall</i>	68
Computational Ethics / <i>Alicia I. Ruvinsky</i>	76
Computer Ethics and Intelligent Technologies / <i>Yefim Kats</i>	83
Computer Worms, Detection, and Defense / <i>Robert J. Cole and Chao-Hsien Chu</i>	89
Conflicting Value of Digital Music Piracy / <i>Matthew Butler</i>	96
Content Filtering Methods for Internet Pornography / <i>Jengchung V. Chen and ShaoYu F. Huang</i>	102
Cyber-Terrorism in Australia / <i>Christopher Beggs</i>	108

Data Security and Chase / <i>Zbigniew W. Ras and Seunghyun Im</i>	114
Defending against Distributed Denial of Service / <i>Yang Xiang and Wanlei Zhou</i>	121
Digital Divide Implications and Trends / <i>Irene Chen and Terry T. Kidd</i>	130
Digital Rights Management Metadata and Standards / <i>Jo Anne Cote and Eun G. Park</i>	136
Dilemmas of Online Identity Theft / <i>Omer Mahmood</i>	143
Document Security in the Ancient World / <i>Christopher H. Walker</i>	150
DRM Practices in the E-Publication Industry / <i>Bong Wee Kian and Norshuhada Shiratuddin</i>	157
Educational Technology Practitioner-Research Ethics / <i>Kathleen Gray</i>	164
E-Health and Ensuring Quality / <i>Prajesh Chhanabhai and Alec Holt</i>	170
Electronic Signatures and Ethics / <i>A. Srivastava and S. B. Thomson</i>	179
Engineering Multi-Agent Systems / <i>Tagelsir Mohamed Gasmelsoeid</i>	187
Ethical Approach to Gathering Survey Data Online / <i>Sophie Nichol and Kathy Blashki</i>	194
Ethical Behaviour in Technology-Mediated Communication / <i>Sutirtha Chatterjee</i>	201
Ethical Concerns in Computer Science Projects / <i>Alistair Irons and Roger Boyle</i>	208
Ethical Debate Surrounding RFID The / <i>Stephanie Etter, Patricia G. Phillips, Ashli M. Molinero, Susan J. Nestor, and Keith LeDonne</i>	214
Ethical Dilemmas in Data Mining and Warehousing / <i>Joseph A. Cazier and Ryan C. LaBrie</i>	221
Ethical Erosion at Enron / <i>John Wang, James Yao, Richard Peterson, and Zu-Hsu Lee</i>	229
Ethical Usability Testing with Children / <i>Kirsten Ellis and Marian Quigley</i>	235
Ethics and Access to Technology for Persons with Disabilities / <i>Belinda Davis Lazarus</i>	241
Ethics and Perceptions in Online Learning Environments / <i>Michelle M. Ramim</i>	246
Ethics and Security under the Sarbanes-Oxley Act / <i>Thomas J. Tribunella and Heidi R. Tribunella</i>	254
Ethics Education for the Online Environment / <i>Lori N. K. Leonard and Tracy S. Manly</i>	260
Ethics in Software Engineering / <i>Pankaj Kamthan</i>	266
Ethics in the Security of Organizational Information Systems / <i>Sushma Mishra and Amita Goyal Chin</i>	273

Ethics of AI / <i>Kevin B. Korb</i>	279
Fair Use / <i>Pasi Tyrväskylä</i>	285
Federal Information Security Law / <i>Michael J. Chapple and Charles R. Crowell</i>	291
Formulating a Code of Cyberethics for a Municipality / <i>Udo Richard Averweg</i>	297
Hackers and Cyber Terrorists / <i>M. J. Warren</i>	304
Homo Electricus and the Continued Speciation of Humans / <i>Katina Michael and M. G. Michael</i>	312
IT Security Culture Transition Process / <i>Leanne Ngo</i>	319
ICT Leapfrogging Policy and Development in the Third World / <i>Amanda Third and Kai-Ti Kao</i>	326
Identity Verification using Resting State Brain Signals / <i>Ramaswamy Palaniappan and Lalit M. Patnaik</i>	335
Individual and Institutional Responses to Staff Plagiarism / <i>Carmel McNaught</i>	342
Information Ethics as Ideology / <i>Bernd Carsten Stahl</i>	348
Information Ethics from an Islamic Perspective / <i>Salam Abdallah</i>	355
Information Security and the “Privacy Broker” / <i>Michael Douma and Eduard J. Gamito</i>	362
Information Security Policies for Networkable Devices / <i>Julia Kotlarsky, Ilan Oshri, and Corey Hirsch</i>	370
Information Security Policy Research Agenda / <i>Heather Fulford and Neil Doherty</i>	377
Internet and Suicide / <i>Dianne Currier</i>	384
Internet Piracy and Copyright Debates / <i>Paul Sugden</i>	391
Internet Research Ethics Questions and Considerations / <i>Elizabeth Buchanan</i>	397
Interviews with Young People using Online Chat / <i>Elza Dunkels and AnnBritt Enochsson</i>	403
Intrusion Detection and Information Security Audits / <i>Terry T. Kidd and Robert K. Hiltbrand</i>	411
Investigation Strategy for the Small Pedophiles World / <i>Gianluigi Me</i>	418
Managed Services and Changing Workplace Ethics / <i>Alan Sixsmith</i>	426
Managing the Environmental Impact of Information Technology / <i>Laurel Evelyn Dyson</i>	433

Measuring Ethical Reasoning of IT Professionals and Students / <i>Mohammad Abdolmohammadi and Jane Fedorowicz</i>	440
Meta View of Information Ethics / <i>Charles R. Crowell and Robert N. Barger</i>	445
Mitigation of Identity Theft in the Information Age / <i>Reggie Becker, Mark B. Schmidt, and Allen C. Johnston</i>	451
Mobile Agents and Security / <i>Fei Xue</i>	457
Modelling Context-Aware Security for Electronic Health Records / <i>Pravin Shetty and Seng Loke</i>	463
Moral Rights in the Australian Public Sector / <i>Lynley Hocking</i>	470
Multimodal Biometric System / <i>Ajita Rattani, Hunny Mehrotra, and Phalguni Gupta</i>	478
Objective Ethics for Managing Information Technology / <i>John R. Drake</i>	486
Parental Rights to Monitor Internet Usage / <i>Benjamin J. Halpert</i>	492
Patient Centric Healthcare Information Systems in the U.S. / <i>Nilmini Wickramasinghe</i>	498
Pedagogical Framework for Ethical Development / <i>Melissa Dark, Richard Epstein, Linda Morales, Terry Countermeine, Qing Yuan, Muhammed Ali, Matt Rose, and Nathan Harter</i>	507
Personal Information Ethics / <i>Sabah S. Al-Fedaghi</i>	513
Pharming Attack Designs / <i>Manish Gupta and Raj Sharman</i>	520
Port Scans / <i>Jalal Kawash</i>	527
Privacy and Access to Electronic Health Records / <i>Dick Whiddett, Inga Hunter, Judith Engelbrecht, and Jocelyn Handy</i>	534
Privacy and Online Data Collection / <i>Călin Gurău</i>	542
Privacy in Data Mining Textbooks / <i>James Lawler and John C. Molluzzo</i>	549
Protection of Mobile Agent Data / <i>Sheng-Uei Guan</i>	556
Rule-Based Policies for Secured Defense Meetings / <i>Pravin Shetty and Seng Loke</i>	563
Secure Agent Roaming under M-Commerce / <i>Sheng-Uei Guan</i>	571
Secure Automated Clearing House Transactions / <i>Jan Skalicky Hanson and Mark B. Schmidt</i>	579
Security Dilemmas for Canada's New Government / <i>Jeffrey Roy</i>	585
Security Model for Educational Satellite Networks / <i>Sanjay Jasola and Ramesh C. Sharma</i>	594

Security of Communication and Quantum Technology / <i>Gregory Paperin</i>	602
Security Protection for Critical Infrastructure / <i>M. J. Warren and T. B. Busuttil</i>	609
Spyware / <i>Thomas F. Stafford</i>	616
Sustainable Information Society / <i>Ralf Isenmann</i>	622
Taxonomy of Computer and Information Ethics / <i>Sabah S. Al-Fedaghi</i>	631
Tools for Representing and Processing Narratives / <i>Ephraim Nissan</i>	638
Traditional Knowledge and Intellectual Property / <i>Ulia Popova-Gosart</i>	645
Universal Internet Access under an Ethical Lens / <i>Alessandro Arbore</i>	655