# Ir. Budi Rahardjo, MSc., PhD.

**Objective**

Teacher, lecturer, enterpreneur, writer, expert in IT security, musician

**Addresses**

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**Formal Education**

1991-1997 University of Manitoba Winnipeg, Canada

- PhD. "Formal Verification for Asynchronous Systems".

1987-1990 University of Manitoba Winnipeg, Canada

- MSc. "System for Analysis of Verbal Behaviour of Speakers with Neurological Diseases".

1981-1986 Institut Teknologi Bandung Bandung

- Sarjana Teknik Elektro (Ir.), "ROMULATOR: Design and Development of a Z80 Emulator".

**Current Research Areas**

Current research areas include

- IT Security; including network and application security
- Cryptography; Elliptic Curve Cryptosystem (implementation and attack)
- High Performance Computing
- Impact of Information Technology (IT) in various areas, such as Education, Corporate, and Government
- Digital Entertainment
- Electronic payment, digital money
- Social network analysis, big data

**Working Experience**

2015 Sekretariat Kabinet Republik Indonesia; Kementrian Pertahanan Republik Indonesia; Kementrian Koordinator Bidang Politik Hukum & Keamanan

**Nara Sumber (Expert Resource Person)**

- *Nara sumber for the creation of "Badan Cyber Nasional" (National Cybersecurity Agency)*

2014 APICTA (Asia Pacific ICT Awards)

**Jury**

- *Jury for Security, and Media & Technology*

2014 Lembaga Sandi Negara

**Resource Person**

- *Rancangan Undang-Undang Persandian* (Indonesian Crypto Law)

2013 – now Mentor CIEL SBM ITB

**Mentor**

- Mentoring for entrepreneurship class (MBA level) at *Center for Innovation, Entrepreneurship, and Leadership* – School of Business and Management, Institut Teknologi Bandung (CIEL SBM ITB)
- http://www.cielsbm.org/en

2012 – now Mentor Founder Institute (Jakarta)

**Mentor**

- Mentoring start-up founders on idea generation and product development.
- http://fi.co

2010 Member BRTI

**Resource Person**

- Formulating Ministry Decree on security in telecommunication, initiated by Badan Regulasi Telekomunikasi Indonesia (BRTI).

2002-now Jury / reviewer Various events / companies

**Jury / reviewer**

- Jury of various competitions / awards related to information technology and telecommunication, such as Warta Ekonomi e-Government awards (5 times), XL writing contest (4 times), Diknas e-Education award, APICTA (Asia Pacific ICT Awards), Cyber Defence Competition (organized by Dept. of Defence), and many more.

2006 – 2014 Founder Start-up companies

**Founder**

- Digital Entertainment (2006 – 2012). Digital Beat Store, the first digital music legal store in Indonesia. The first store was currently part of Blitzmegaplex cinema at Paris Van Java, Bandung. The second store is located at Blitzmegaplex, Grand Indonesia, Jakarta.
- Insan Music Store (2014). The second generation of digital music store. www.insanmusic.com

2006 IT Master Plan, Security Audit Bank Indonesia

**IT Architect, Security Expert**

- Design IT architecture for Bank Indonesia
- Evaluate Bank Indonesia's IT Security posture
- Mapping Bank Indonesia's applications

January 2006 IT Standarization Indonesia

**Head of Team**

- Develop National Standar for IT competence in Computer Network, System Administration, and Technical Support

2003 – 2005 Recruiter Various companies

**Evaluate IT Human Resources for various companies and Indonesian Government Institutions**

- Assist various companies in recruiting programmers (August 2006).
- Assist Bank Rakyat Indonesia (BRI) in recruiting human resources for auditor, system engineer, system analyst, programmer and general IT staff. (2003, May 2004, August 2006)
- Recruitment for Badan Regulasi Telekomunikasi Indonesia (BRTI), a Telecommunication Independent Regulatory Body (2003)

January 2003 – September 2004 - Director of R&D ITB ITB

**Director of Research & Development Center on Industry and Information Technology Institut Teknologi Bandung**

- Manage R&D directions of various Research Groups at ITB

March 2002 – now security consultant major institutions in Jakarta

**Security Consultant**

- Have given more than 50 security presentations all over Indonesia for public and in-house. Clients include Bank Indonesia (BI), Bank Mandiri, Bank Rakyat Indonesia (BRI), Bank Negara Indonesia (BNI), Bank Syariah Mandiri, BTN, Bank Jabar, Indonesia Power, Indosat, Newmont, various IT companies. Clients are in mostly in Banking, Telecommunication, Manufacturing,
- Penetration Testing for PT Newmont
- Internet Banking Penetration Testing for Bank Mandiri
- Complete security audit for Bank Negara Indonesia (BNI) (2005), Bank Rakyat Indonesia (2004), Bank Indonesia (2002, 2005)
- Providing security training (with INDOCISC) for internal Bank Mandiri staff: May 2003
- Investigating a security incident at a major bank in Jakarta (I cannot provide the name of the bank): January – February 2006
- Investigating a security incident at another major bank in Jakarta (I cannot provide the name of the bank): March – April 2002
- Complete security audit (with INDOCISC and LPPM ITB) of a large bank in Jakarta: August 2002 – December 2002

Mei 2001 – now consultant Deperindag

**Consultant on IT Human Resources**

- Develop “Rencana Induk Pengembangan Industri Teknologi Informasi dan Elektronika: Aspek Sumber Daya Manusia” for Departemen Perindustrian dan Perdagangan (Ministry of Industry and Trade).

2000-now tech consultant Cyberlaw

**Member of team to develop Cyberlaw in Indonesia, with UNPAD.**

- Responsible for the technology aspect of (draft of) cyberlaw, which unfortunately up to this point has not made it into a law.

1999 – now motivator, evangelist, web master Bandung High Tech Valley

**Bandung High Tech Valley, an initiative by Ministry of Industry and Trade**

- One of Bandung High Tech Valley motivators, organizers, evangelist
- Mailing list manager and web master of BHTV web site

October 2000 – now Tech Writer Various publications

**Tech writer for some publications (conventional & new media/portal)**

- Regular (monthly) columnist at Infolinux, Koran Tempo, and various portals (M-Web, Satunet). Some of them have ceased to exist.
- Unpublished and some published articles and books are available at my homepage http://budi.insan.co.id (and now at scribd.com)

October 2000-now CTO Various Start-up Companies

**Chief Technology Officers of several start-up companies, such as**

- PT INDO CISC
- PT Sumber Daya Telematika Indonesia
- PT Insan Infonesia

April 2000 Technology & Security consultant Indosign, Jakarta

**Technology and security consultant for Indosign, the first commercial Certificate Authority company in Indonesia.**

April 2000 Security consultant PCI, Jakarta

**Security consultant for designing PT Gresik network blueprint, a project managed by PT Praweda (PCI).**

April 1999-June 2001 PIKSI, ITB Bandung

**Head of "Operasi & Pelayanan Teknologi Informasi" (IT Services) UPT Komputer PIKSI ITB, responsible for providing Information Technology-related services for ITB.**

1998 – September 2005 Top Level Domain ID Admin Bandung

**Top Level Domain ID (TLD-ID) Admin**

- The .ID domain admin. Delegated from IANA/ICANN

Nov 1998 - Feb 1999 Technical Consultant Jakarta

**Computer networks specialist for Marine Resource Evaluation and Mapping (Maremap) Project (an ADB project)**

- Computer network specialist. Designing a method to enhance data access and sharring.

1997-2002 Lab ELKA, EL, ITB Bandung

**Secretary of Laboratorium Elektronika dan Komponen (ELKA), Electrical Engineering, Institut Teknologi Bandung (ITB)**

- Managing the *Electronics and Components Laboratory*, EE Department, ITB

1997-2005 RI-Net Jakarta

**Member of "Tim Pelaksanan Aplikasi RI-Net"**

- Coordinating RI-Net's open e-mail and world wide web system for Government officials (President, Ministers, Governors, etc.), including managing their network security systems.
- Managing the technical staff.

1997-now PPAU Mikroelektronika, ITB Bandung

**Researcher (October 2001-now)**
**Vice Head / Secretary (1997-October 2001)**
**Director of Programme (2000-October 2001)**
**Director of Management Information Systems (1997-2000)**
**Pusat Penelitian Antar Universitas (PPAU) Mikroelektronika**
**"Inter University Research on Microelectronics"**

- Manage PPAUME programme and information system (MIS)
- Teach and research in the field of VLSI design
- Develop and maintain "IC Design Lab", including maintaining the hardware, software, and CAD Tools
- Research in formal methods in hardware design, asynchronous circuits, computer networks, security, Information Technology, and Electronic Information Systems (EIS).

1997-now School of Electrical Engineering and Informatics (STEI), ITBBandung

**Teaching Staff**

- Taught and researched in the "Electronics and Components Lab" and "Comuter Engineering", Electrical Engineering Dept., Institut Teknologi Bandung.
- Research in the Computer Engineering, STEI, ITB, Bandung.
- Teach at Faculty of Graduate Studies.
- Courses taught:
  EL 203 Foundation of Electrotechnics (1998, 1999),
  EL 208 Digital Techniques [Switching Theory] (1999),
  EL 424 Pattern Recognition (1997,1998),
  EL 494 / EC7030 Formal Methods in Hardware Design (1999 – 2004),
  EL 705 Advanced Digital Design, VLSI Testing (grad level, 1998),
  EL 695 / EL 776 / EC5010 / EC7010 / II5166 Security of Information System (grad level, 1998 – 2010),
  EL2001 Introduction to Programming (with C++) (undergrad level, 2003 – 2005),
  IE10T1 Technology Concept (Konsep Teknologi) (undergrad, 2005-2006)
  EL2246 Elektronika Industri (2009)
  KU1073 Introduction to Information Technology (undergrad, 2008-2010)

II 5166 Software Security (grad level, 2012 – 2013)
EL 6115 Secure Operation and Incident Handling (grad level, 2014)

- Various projects, final projects, thesis, dissertation of my students include
  - Design and implementation of streaming data sniffer
  - Mobile agents applications on network discovery, online auction (implemented as Java aplets)
  - The (in)security of VoIP
  - Study on Certification Authority implementation (using Open CA)
  - Mail Transport Agent protection (tools to monitor spam and mailbomb)
  - Web-based log analyzer
  - Web-based network / pacjet monitor
  - Implementation of RSA and IDEA on DSP
  - Finite Field software module/toolkit (as part of ECC group)
  - Prototyping of a cryptography bruteforce attack software, including Pollard Rho's based ECC attack
  - Mobile malware detection

1997-now ID-CERT Indonesia

**Indonesia Computer Emergency / Incident Response Team**

- Initiate the formation of Indonesia CERT; founder and chairman
- Contact for security in computer networks and the Internet for ".id" domain. Provide incident handling, security information and tutorials for various institutions in Indonesia
- One of the founders of APCERT (Asia Pacific Computer Emergency Response Team)
- http://www.cert.or.id

1996-now PT Insan Infonesia Bandung, Indonesia

**Founder**

- Handling the technology development including hardware & software development, Intranet solutions, telecommunications, and other high-tech incubators and ventures.
- Software outsourcing based on various technologies and frameworks
- Developed products such as Komplane (computer log analysis) and digital music store

1996-1997 TRLabs Winnipeg, Canada

**Post-doc researcher at Telecommunications Research Laboratories (TRLabs)**

- Research in the field of Network Computing
- Developed "Web-based Virtual Storage Environment" for Network Computers (such as the Javastation, WebTV, and other set-top boxes).

1996-1997 Electrical and Computer Eng., U of Manitoba, Winnipeg, Canada

**Teaching staff**

- Taught "*24.422 Switching Theory*" for foruth-year students in the Electrical and Computer Engineering Department of University of Manitoba, Canada.

1995-1996 TRLabs Winnipeg, Canada

**Graduate Student Researcher**

- Modeling computer protocol (multimedia protocol) and hardware (an asynchronous CounterFlow Pipeline Processor) in SDL.

1989-1996 Computer Services, U of Manitoba Winnipeg, Canada

**UNIX System Administrator**

- Responsible for software in the UNIX systems used by most students.
- Part of the World Wide Web team development

1987-1997 Electrical and Computer Eng., U of M, Canada

**System Administrator and Research Assistant**

- Responsible for UNIX system software, such as sendmail, for the whole Department.
- Responsible for VLSI CAD Tools such as Synopsis. Developed tutorials for some VLSI CAD Tools, including VXI-based test systems.

1989-now Internet and network duties Internet

**Sysadmin, webmaster, manager**

- Vice President, Research and Development, Global Network Communications (San Francisco, USA)
- Director of Technology, Hardware & Software Developer for PT Insan Komunikasi (Bandung)
- Director of Technology dari Indonesia Forum [USA], a cybercommunity forum for Indonesians
- Domain admin for various web sites: Bandung High-Tech Valley, Indonesia Forum, Global Network Link, Bohol Network, Airland, Isnet, Insan Infonesia, Indonesian Homepage, IDNIC, IDCERT, and many other web sites.
- Maintenance of several mailing lists, including PAU-MIKRO mailing list which was founded in 1987 and still a "de facto" mailing list to discuss Internet and computer technology in Indonesia.
- Member of Paguyuban ITB-net, Campus Backbone.
- 1989-1997 - Maintener of Bison UUCP Network (Manitoba, Canada) which provided free e-mail and Usenet news to hundreds of users in Winnipeg, Canada.

## Interests

Computers (hardware, software, networks, operating system, programming languages, information security, human-computer interaction, multimedia, intelligent agents, eCommerce), reading, music (including computer music), travelling, high-tech business, start ups, and teaching.

**Skills**

- Programming in C, C++, SQL, Perl, Java, Tcl/Tk, sh, and some assembly languages
- Document processing with HTML, TeX, LaTeX, troff (groff)
- Telecommunications and VLSI designs with SDL, PROMELA, VHDL, and Verilog. I have "Logic Synthesis with VHDL" and "VHDL System Simulation" certificate from Synopsys and Canadian Microelectronics Corporation (September, 1994).
- Internet design and programming (World Wide Web, Gopher, FTP, and other information systems) and security
- Ability to install and manage UNIX systems (SunOS, Solaris, Linux, FreeBSD, HP, OSF/1)
- Smartcard programming. I have completed smartcard training *"Foundation SmartCard Tech, MPCOS, and GPK Training*," Gemplus, Jakarta, 20-23 July, 1999.
- Information security from low level to high level

**Achievements**

- Nominated for Telkom Indigo Awards Fellow, 19 November 2010
- Manage "The Ultimate Indonesian Homepage", **the first and most comprehensive Indonesia web site. (Directhit reported number one on their list.)** Previously it was located at the University of Manitoba, currently it is located at http://indonesia.insan.web.id
- Designed and deploy security system for the on-line result (high performance web site) of Indonesian 1999 Election. (May - August 1999). The system is capable of handling 1 million web requests per day (limitted by 1999 technologies).
- Designed and deploy RI-Net: one of Telematika Indonesia's flagship applications which provide open email to Government officials, and web site (1997-1999).
- Author of "Memahami Teknologi Informasi: Menyikapi dan Membekali Diri Terhadap Peluang dan Tantangan Teknologi Informasi," Elex Media Komputindo, 2002.
- Author of "*Buku Pegangan Sistem UNIX dan Internet*," 1994, Open Pathways (USA). (2nd edition is available in Indonesia)
- Designed and implemented "UMUID", a Global Userid Database for Computer Services University of Manitoba, Winnipeg, Manitoba, Canada.
- Developed some free utilities and programs (available over the Internet) which can be used to manage e-mails and mailing lists. Examples are ASER and b-server (mail-based archive server), brn (threader news reader), lpctool (lpc printer controller for X window)
- Was a maintainer for official perl for MS-DOS

**Organization Achievements / Affiliation**

- Member of "Forum Nama Domain Indonesia", 2013 – now.
- Bandung High-Tech Valley (BHTV) Foundation, founder, 2005.

- Member of "Panitia Teknik Perumusan Standar Nasional Indonesia (SNI) Transaksi Informasi Melalui Media Elektronik," Kementrian Komunikasi dan Informasi, 2004. (No: 41A/KEP/S.KOMINFO/7/2004.)
- Member of The Institute of Electrical and Electronics Engineers Inc. (IEEE), the largest professional electrical and electronics engineers organization in the world.
- Was the president of Indonesian Students Group (ISG), Winnipeg, Manitoba, Canada
- Member of "Majelis Syuro ISNET", Islamic Network, the first Indonesia cyber community (1980s).
- President of "Himpunan Mahasiswa Teknik Elektro", Institut Teknologi Bandung (HME ITB), Electrical Students Association, 1984.
- SMAN 1 Bandung, OSIS and Autodidac discussion group

**Selected Recent Publications**

1. Budi Rahardjo, "*Social Engineering Dengan Menggunakan URL-Bait*," National Internet Security Day (NISD) Seminar organized by ID-SIRTII, Hilton Hotel Bandung, 5 November 2014.
2. Budi Rahardjo, "Sekilas Mengenai Forensik Digital," *Jurnal Sosioteknologi,* FSRD-ITB, Edisi 29, Tahun 12, Agustus 2013, hal 384-387.
3. Andy Alamsyah, Budi Rahardjo, Kuspriyanto, "Financial Fraud Detection Using Social Network Analysis," *Proceeding of e-Indonesia Initiatives Forum 2013*, pp. 61 – 66, Bandung, 23-24 May 2013.
4. Yudho Satrio Wirawan and Budi Rahardjo, Pengukuran Kesadaran Keamanan Informasi Perusahaan Finansial yang Berfokus kepada Pengukuran Tingkah Laku Sumber Daya Manusia, *Konferensi dan Temu Nasional Teknologi Informasi – e-Indonesia Initiatives*, ITB, pp. 268 – 271, 24-25 April 2012.
5. Marisa Paryasto, Budi Rahardjo, Intan Muchtadi-Alamsyah, and Kuspriyanto, *Rancangan Unit Aritmetika Finite Field Berbasis Composite Field*, Munas Aptikom Politeknik Telkom, 2010.
6. Marisa W. Paryasto, Budi Rahardjo, Intan Detiena Muctadi, and Muhamad Hafiz Khusyairi, *Implementation of Polynomial Basis – Optimal Normal Basis I Conversion*, Jurnal Ilmiah Teknik Komputer, June, 2009
7. Budi Rahardjo, *Diary Budi Rahardjo*, Oase Media, 2009.
8. Budi Sulistyo, Budi Rahardjo, and Dimitri Mahayana, On Applicability of Chaos Game Method for Block Cipher Randomness Analysis, *International Conference on Electrical Engineering and Informatics*, Volume I, Selangor, Malaysia, IEEE Computer Society, August 2009.
9. Budi Sulistyo, Budi Rahardjo, Dimitri Mahayana, and Carmadi Machbub, "New Methodology of Block Cipher Analysis Using Chaos Game," *ITB Journal of ICT*, Vol. 5 C, No. 2, 2011, 105-124.
10. Budi Sulistyo, Budi Rahardjo, Dimitri Mahayana, Carmadi Machbub, Randomness Analysis of Block Cipher Using Chaos Game Method, *International Conference on Rural Information and Communication Technology 2009*, ITB, 17 June 2009.

11. Samuel Beta, Bambang Riyanto, Armein Z. R. Langi, Budi Rahardjo, Penguraian Tugas Sinkripsi untuk Kriptografi pada Jaringan Ad Hoc, *Journal Elektronika dan Telekomunikasi*, Vol. IX, No. 2, LIPI, 2009.
12. Budi Rahardjo, Marisa W. Paryasto, Software Cryptography Issues, *International Conference on Rural Information and Communication Technology 2009*, ITB, 17 June 2009.
13. Dimitri Mahayana, Budi Rahardjo, Arry Akhmad Arman, Khairul Ummah, Team Riset Sharing Vision, "*Review & Survey Teknologi Informasi di Indonesia*," Penerbit ITB, 2008. ISBN 978-979-1344-35-7.
14. "A Bridge Between Engineering and Mathematics," presented at *International Conference on Graph Theory and Information Security* - ICGTIS 2007, February 10-13, 2007, Bandung, Indonesia.
15. "BHTV 2.0: A second attempt to create Siliconia in Indonesia," *International Seminar on Urban Culture. Arte-Polis: Creative Culture and the Making of Place*, 21-22 July 2006, Institut Teknologi Bandung.
16. "*Matinya Bisnis Telekomunikasi Indonesia*," Bisnis Indonesia, 1 Februari 2006.
17. B. Rahardjo, A. Triwidada, M. Sutarman, "Security Evaluation Checklist." Proceedings of INA-CISC 2005: Indonesia Cryptology and Information Security Conference. March 30-31, 2005, pp. 135-138.
18. Budi Rahardjo, "Nama Domain dan Beberapa Aspek Hukum Yang Terkait," Pusat Pengkajian Hukum (PPH) Newsletterm No. 57, Juni 2004.
19. Budi Rahardjo, "Pemanfaatan Teknologi Informasi di Perguruan Tinggi". Makalah untuk e-Government Summit "Sosialisasi Mengenai Implementasi Penerapan UU No. 19 Tahun 2002 Tentang Hak Cipta; Pemerintah Sebagai Panutan Dalam Ketaatan Lisensi Peranti Lunak", Tim Koordinasi Telematika Indonesia, Novotel Coralia Hotel, Bogor, 9 Maret 2004.
20. Budi Rahardjo, "Selamatkan Masa Depan Indonesia Dengan Sains dan Teknologi". ITB Fair 2004, Aula Barat ITB, 25 Februari 2004.
21. Budi Rahardjo, "Apakah Negara Berkembang Membutuhkan Perlindungan HaKI?" Lokakarya Terbatas tentang Hak Kekayaan Intelektual, Pusat Pengkajian Hukum (PPH) dan Pusdiklat Mahkamah Agung, Jakarta, 10-11 Februari 2004.
22. Budi Rahardjo, "Science dan Technology Park di Perguruan Tinggi". (presentation material, related paper Presented at Workshop "Model Penerapan Hasil Penelitian di Perguruan Tinggi", Pusat Pembinaan dan Pengembangan Program Diploma (P4D), Ciwaruga, Bandung, 11 June 2003.
23. Budi Rahardjo, "Pelajaran Dari Mendirikan Perusahaan Startup. (Lessons learned from Starting-Up) ". Presented at Lokakarya Pusat Inovasi LIPI, Bandung. 5 June 2003.
24. Budi Rahardjo, "Memahami Teknologi Informasi: Menyikapi dan Membekali Diri Terhadap Peluang dan Tantangan Teknologi Informasi," Elex Media Komputindo, 2002. (new book)

25. Lazuardi Nasution, Budi Rahardjo, “Denial of Service: Proof of concept,” *Proceedings of Asia-Pacific Conference on Communications (APCC 2002)*, Bandung, pp. 301-303, September 17-19, 2002.
26. Budi Rahardjo, “*Arsitektur Internet Banking Yang Terpercaya: Trusted Internet Banking Architecture*,” white paper for INDOCISC (www.indocisc.com), May 2002.
27. Budi Rahardjo, “Bisnis Open Source,” in Richardus Eko Indrajit eds.., “*Open Source Linux: Membangun Kekuatan Baru Teknologi Informasi Dunia*,” Elex Media Komputindo, 2002.
28. Budi Rahardjo, “A Story of Bandung High-Technology Valley,” presented at “*Seminar Nasional Industri Berbasis Teknologi Informasi dan Telekomunikasi*,” Aula Barat, ITB, Bandung, 11 May 2002.
29. Budi Rahardjo, “Kejahatan Internet yang belum terjangkau,” Koran Tempo, 10 Juni 2001.
30. Budi Rahardjo, "Bisnis Open Source," presented at National Open Source Workshop and Conference (NOSWOC 2000), Universitas Ahmad Dahlan, 25-26 September 2000.
31. Budi Rahardjo, Intan Achmad, “Challenges and Opportunities Facing Academic Institutions in Asia Pacific,” invited keynote speech at Symposium on Theory and Applications of Communication and Information Technology (TACIT 2000), Bangkok, Thailand, August 24-25, 2000.
32. Budi Rahardjo, "Permasalahan HaKI Sekitar Electronic Commerce," InfoHaKI, Vol. 1, No.5, Maret 1999. (Title translation: Intellectual Property Issues around Electronic Commerce.)
33. Budi Rahardjo, "Penggunaan Formal Methods Dalam Disain Perangkat Keras," Technical Report, PPAUME TR 1999-01, PPAU Mikroelektronika ITB, 1999. (Title translation: Formal Methods in Hardware Design.)
34. Budi Rahardjo, "Mengimplementasikan Electronic Commerce di Indonesia," Technical Report, PPAUME TR 1999-02, PPAU Mikroelektronika ITB, 1999. (Title translation: Implementing Electronic Commerce in Indonesia.)
35. Budi Rahardjo, “*An Introduction to Hardware Equivalence Checking*,” The Third Workshop on Electro Communication and Information (WECI-III), Institut Teknologi Bandung, March 3-4, 1999.
36. Budi Rahardjo, “Keamanan Sistem Informasi Berbasis Internet,” 1998. Draft of a book which is available online: <http://www.paume.itb.ac.id/rahard/id-cert/handbook.pdf>
37. Budi Rahardjo, “Keamanan Sistem Internet,” Pikiran Rakyat (daily newspaper), 3 March 1998.
38. Budi Rahardjo and Richard Mengko, “In Search for a Personal Assitant: a quest in managing our electronic junk,” presented at *the NEDO/BPPT International Seminar on Electronics and Information Technology*, Jakarta, 17 February 1998.

39. Budi Rahardjo, "*Keamanan Sistem Informasi: Beberapa Topik Keamanan di Internet*", Konferensi Informasi Infrastruktur Nasional, ITB, 1997.
40. Budi Rahardjo dan Dian Sukma Rahayu, "Mengamati Karakteristik Milis Indonesia," *INFOKOMPUTER,* Vol. 1, No. 9, pp. 12-15, 15 November 1997.
41. B. Rahardjo and R.D. McLeod, "Design and analysis of a counterflow pipeline processor in SDL," *Journal of Microelectronics and System Integration*, 4(1), pp. 33-41, 1996.
42. B. Rahardjo, J. F. Peters, and R. D. McLeod, "Communicating Processes in designing asynchronous circuits," *IEEE Aerospace and Electronic Systems Magazine*, pp. 8-11, 1995.
43. B. Rahardjo and R. D. McLeod, "Verification of speed-independent asynchronous circuits with protocol validation tools," in *Proc. Of IEEE Pacific Rim Conference on Communications, Computers, and Signal Processing*, pp. 257-260, 1995.
44. B. Rahardjo, "SPIN as a hardware design tool," in *First SPIN Workshop*, Montreal, Canada, October 1995.
45. B. Rahardjo, "Hardware Equivalences," Technical Report UMECE TR-95-002, Electrical and Computer Engineering, University of Manitoba, 1995.
46. B. Rahardjo, "Asynchornous Hardware Design: an overview," Technical Report, UMECE TR-92-215, Electrical and Computer Engineering, University of Manitoba, 1992.
47. Budi Rahardjo, "*Buku Pegangan Sistem Internet*", Open Pathways, 1993.

**Recent Presentations / Lectures / Talks**

I have presented quite a number of talks, presentations, and lectures. The following is a list of recent (selected) public talks and presentations (outside formal presentations at the University or internal trainings).

1. "*Klik and Modar: Social Engineering Dengan Menggunakan URL-Bait*," presented at National Security Day, ID-SIRTII, Hilton Hotel, Bandung, 5 November 2014.
2. "*Are We Ready For Creative Industry?*," presented at 5th Seminar and Conference "Snapshot of Content Business in Today's ICT Industry (SCBTII) 2014," organized by Telkom Economic and Business School, Management of Business in Telecommunication & Informatics, Hilton Hotel Bandung, October 13th, 2014.
3. "*Konsep Dasar Mengenai Audit Sistem Informasi dan Teknologi: Aspek Security*," Workshop Pendalaman On Site Visit Terkait Security Audit Sistem Penyelenggara Jasa SP, Bank Indonesia, Trans Luxury Hotel Bandung, 27 September 2014.
4. "*Konsep Kordinasi Pelaporan & Penanganan Insiden (CSIRT),"* Ministry of Communication and Information, Aston Primera Pasteur, 2 May 2014.
5. "*Software Musik Open Source*," presented at ICrOSS – Indonesia Creative Open Source Software seminar, Hotel Bumi Surabaya, 23-24 April 2014.

6. "*A New Dawn of Technological Innovation: The Sun is Rising in the East*," presented at *InnovFest* 2014, Asian Innovations Going Global, National University of Singapore and NUS Enterprise, Singapore, 14-16 April 2014. http://www.innovfest.sg
7. Internal discussion at Dewan Analis Strategis, Badan Intelijen Negara, "*Masalah IT Yang Berkaitan Dengan Cyber: Kemampuan dan Aturan di Indonesia*", 29 November 2013.
8. Keynote Speaker in the 4th Seminar "*Snapshot of Content Business in Today's ICT Industry 2013*", Telkom Economics & Business School, Management of Business in Telecommunication & Informatics, Telkom University, Hotel Horizon, Bandung, 27 November 2013.
9. "*Infrastructure & Network Security for eTraining Management System*," presented at "Improving Education Quality Through ICT" Seminar, held at PPPPTK BMTI Cimahi, 25 November 2013.
10. Keynote Speaker, Seminar Nasional Teknologi Informasi, Komunikasi, dan Industri 5 (SNTIKI 5), UIN SUSKA Riau, Hotel Pangeran Pekanbaru, 2 Oktober 2013.
11. "*Pengantar Keamanan Informasi*," Sosialisasi Penggunakan Teknologi Informasi, Pusat Pelaporan dan Analisis Transaksi Keuangan (PPATK), 29 July 2013.
12. *"Kesiapan Lulusan Perguruan Tinggi Indonesia,"* presented Fujitsu Red Arrow, Le Meridien Hotel Jakarta, 25 Juli 2013. http://rahard.wordpress.com/2013/07/26/kesiapan-lulusan-perguruan-tinggi/
13. "*Kepemimpinan di Era Digital*," Program Pengembangan Kepemimpinan Bank Indonesia, Bank Indonesia, 16 July 2013, 25 June 2013, and 21 May 2013.
14. *"Digital Forensics,"* Seminar Nasional "Forensik dalam Perspektif Sosioteknologi", Jurnal Sosioteknologi – KK Ilmu Kemanusiaan – FSRD ITB, Aula Timur ITB, Bandung, 4 July 2013.
15. *"Pengantar Nama Domain Indonesia,"* Bandung Lautan .ID, ComLabs ITB, 3 July 2013.
16. *"Indonesia Internet Security Status 2012/2013"*, presented at *Cyber Intelligence Asia 2013*, Royal Chulan Hotel, Kuala Lumpur, 13-14 March 2013.
17. *"Turning Technology into Business"*, presented at "Kick Off Seminar Technopreneurship Orientation Program (TOP), Aula Barat ITB, 30 Oct 2012.
18. "*Tren Kebutuhan Pendidikan Keamanan Informasi di Indonesia*," presented at Sekolah Tinggi Sandi Negara (STSN), 11 May 2011.
19. Seminar Digital Content Creation, Institut Manajemen Telkom, 31 May 2013.
20. "*Kreatifitas dan Inovasi dalam Bisnis Digital*", guest lecture in "*Creativity and Innovation (MB 4048)*" class, School of Business and Management, 3 May 2011.
21. "*ID-CERT Activities*," ID-CERT open/public discussion, Cyber building, Jakarta, 28 March 2011.

22. "*The Future of Digital Entertainment in Indonesia*," presented at TEDx Bandung, 27 March 2011. TED is Technology, Entertainment, and Design.
23. "*Audit Teknologi Informasi*," *Kuliah Kapita Selekta*, Institut Teknologi Telekom (IT Telkom), 3 March 2011.
24. "Blogging," Free Saturday Lessons, Comlabs ITB, 26 February 2011.
25. "*Menilai Karya Ilmiah*, " presented at *Seminar Pembuatan Journal*, Politeknik Telkom, 21 February 2011.
26. Seminar entrepreneurship, Himpunan Mahasiswa Informatika, 30 January 2011.
27. "*Cloud Computing Security*," presented at Lintas Arta's "Business Outlook & Trend 2011," Ritz Carlton Jakarta, 30 November 2010.
28. "*Secure and Healthy Internet and Games*," presented at SD Theresia, 13 November 2010
29. "*Blogging and Citizen Journalism*," presented at Comlabs ITB, 30 October 2010.
30. "*Indonesian Domain Name Management*," presented at Forum e-Gorvernment Indonesia, Ministry of Communication and Information, 26 October, 2010.
31. "*Security in Cloud Computing,*" presented at Cloud Computing Innovation Workshop, 18 October 2010.
32. "*IT and Enterpreneurship*," presented at Wisma Sejahtera Bandung, 16 October 2010.
33. "Writing Technical Articles", presented at Internal Workshop for Electron Magazine, 29 August 2010.
34. "Security and Telecommunication", presented at BRTI Internal Workshop, 18 Mei 2010.

35. "eMarketing Bagi Dunia Usaha," presented at "Seminar Strategi Marketing: Kunci Sukses Dalam Memenangkan Persaiangan Global", Organized by B4T, Bandung, 30 Juni 2009.
36. "Secure Rural ICT: and its research implications," a keynote speech presented at *International Conference on Rural Information and Communication Technology 2009*, ITB, 17 June 2009.
37. "Technology, Entertainment, and Us". Presented at Blitzmegaplex 5th Annyversary, Grand Indonesia, 15 April 2009.
38. "Trusting the Trust". (materi dalam format Power Point). Presented at Inixindo Security Day Seminar, The Executive Club, Jakarta, 19 Maret 2009.
39. "Teknologi dan Entrepreneurship". Presented at "Megatron Talk Show", SBM ITB, 14 September 2008.
40. "Kemanan Teknologi Informasi dan Kriptografi". Presented at "Seminar Kriptografi Sekolah Tinggi Sandi Negara 2008", Balai Sidang UI, Depok, 12 Juli 2008.
41. "Investigating Network Intrusion and Computer Forensic". Dipresentasikan 7 April 2008 di acara Telkom Professional Development Center.

42. "Jadi, Anda Mau nge-Blog?". Presented at Gamais presentation, Labtek V (lantai 3), ITB, 24 Februari 2008
43. "Bagaimana Membuatmu Jatuh Cinta pada Sains dan Teknologi". Presented at Netsains.com, Senayan Trade Center, 19 Januari 2008.
44. "Perkembangan Teknologi Informasi dan Industri Telematika". Presented at Seminar Himpunan Mahasiswa Program Studi Teknik Industri, UNPAR, Bandung, 30 November 2007.
45. "Kebijakan Fasilitas Industri Perangkat Lunak dan Konten" presented at *International Conference on Rural ICT 2007*, Institut Teknologi Bandung, 7 Agustus 2007.
46. "Zen of Cryptography", seminar organized by students of STSN, 4 Agustus 2007
47. "Menuju Terwujudnya Secure e-Government Indonesia di Abad Informasi Digital", Diklat Kepemimpinan Tingkat IV Persandian Nasional Angkatan ke II T.A. 2007.
48. "Teknik Presentasi", presentation for ITB lecturers, ITB, 31 Juli 2007.
49. "Migrasi ke Open Source" presented at JGOS 2007 - Jogja Goes Open Source, Yogyakarta.
50. "Hancurnya Industri Musik Indonesia", presented at Kementrian Riset dan Teknologi, 9 Mei 2007.
51. "Perkembangan Teknologi Open Source Sebagai Solusi Bisnis" presented at *Seminar & Workshop Open Source*, Menara TELKOM RisTI, Bandung, 21 Maret 2007.
52. "A Bridge Between Engineering and Mathematics," presented at *International Conference on Graph Theory and Information Security* - ICGTIS 2007, February 10-13, 2007, Bandung, Indonesia.
53. "Masa Depan IT," open presentation for new students, UNIKOM, Bandung, 19 September 2006.
54. "Network Security: Dari *Cracker* ke *Hacker* ke *Security Professional*," security seminar, Ilmu Komputer UNPAD, 9 September 2006.
55. "The Cost of Insecurity," *Bellua Cyber Security Conference*, Jakarta Convention Center, 31 August 2006.
56. "Cryptography On Spotlight," Cryptography and Wireless Security Seminar, Senat Mahasiswa Sekolah Tinggi Sandi Negara, Jakarta, 12 August 2006.
57. "Apakah Sandi dan Keamanan Informasi Merupakan 'National Interest'?", Launching MASPI (Masyarakat Sandi dan Keamanan Informasi), UI, Jakarta, 10 August 2006.
58. "BHTV 2.0: an attempt to create Siliconia in Indonesia." Presented at Artepolis, Architecture Seminar, ITB, Bandung, 22 Juli 2006.
59. "Security Architecture." Hotel Aryaduta, Jakarta, 24 Mei 2006.
60. "Teknologi Informasi Terkini dan Tantangan Pengamanannya," Internal Bank Indonesia, 17 Mei 2006.
61. "Running Business in the Wireless Era," XL, Bali, 19 April 2006.
62. "Amankan Aset Digital Kita!," Acer Discussion, Desa Gumati Sentul, 12 April 2006.

63. “Security in Telcos Industry,” Milidetik Seminar, 24 February 2006.
64. “Matinya Bisnis Telekomunikasi Indonesia,” *Diskusi Terbuka “Rencana Strategis Pemanfaatan Teknologi Telematika Bagi Kemajuan Bangsa”, Pusat Penelitian Teknologi Informasi dan Komunikasi, Sekolah Teknik Elektro dan Informatika, Ikatan Alumni ITB*, 8 February 2006.
65. “GNU/Linux Solusi Security dan HaKI,” UNIKOM, Bandung, 24 January 2006.
66. “No ICT Without ICT: Integrated Circuit Technology (ICT) as the basis for leading edge Information & Communication Technology (ICT),” presented at IC Design Workshop organized by ITB Microelectronics Center, Bandung, 26 Juli 2005.
67. "I Crypt, You Crypt." Invited Talk at Indonesian Cryptology and Information Security Conference, organized by Lembaga Sandi Negara (LSN) and IECI, Jakarta, 30-31 March 2005
68. "Teknologi Informasi dan Cybersex." Presented at STT Telkom, Bandung, 8 Maret 2005.
69. "Security Implementation on Mission Critical Applications.” Presented at Software Developers Day, organized by ASPILUKI, at Gedung Bidakara, Jakarta, 2 March 2005.
70. "Ilmu dan Seni Keamanan Informasi: Theory and Practice." Kuliah Terbuka di Politeknik EL ITS, Surabaya, 8 Januari 2005.
71. "The dissapearance act of information bandits." Keynote speech at "Seminar Network Security dan Cryptography," organized by Himpunan Mahasiswa Teknik Elektro (HME) ITB, Aula Barat ITB, 11 Desember 2004.
72. "Kebijakan dan Strategi Pengaturan Terhadap Infrastruktur ICT Vital," presented at "Seminar Nasional Tentang Cybercrime," Kementrian Komunikasi dan Informasi, Hotel Ibis Tamarin, Jakarta, December 7th 2004
73. “Novelties On The Internet Technology and Services,” Presented at “Techno Pre-Eminence 10th Conference & Exhibition 2004” (TPE-2004), RISTI, PT Telekomunikasi Indonesia, December 2nd 2004.
74. “Tren Teknologi Telekomunikasi dan Kinerja Keuangan Perbankan,” presented at InfoBank’s Seminar “Maximizing Bank’s Profit through Integrated Telecommunication Technology,” Shangri La Hotel, Jakarta, 25th November 2004.
75. “e-security: keamanan teknologi informasi.” Presented at "Cybercrime di Bidang Postel", Jakarta, 7 September 2004.
76. “Pemanfaatan Teknologi Informasi Untuk Promosi Destinasi Wisata.” Presented at "Pelatihan Promosi Destinasi Wisata", Kelompok Penelitian dan Pengembangan Kepariwisataan (P2PAR), Institut Teknologi Bandung, Hotel Sawunggaling, 3 Agustus 2004.
77. "Pengantar Nama Domain", presented at National Internet Conference and Education (NICE), Hilton, Jakarta, July 2004.
78. “Pemanfaatan Teknologi Informasi di Perguruan Tinggi.” Presented at "Sosialisasi Mengenai Implementasi Penerapan UU No. 19 Tahun 2002 Tentang Hak Cipta; Pemerintah Sebagai Panutan Dalam

Ketaatan Lisensi Peranti Lunak", Tim Koordinasi Telematika Indonesia, Novotel Coralia Hotel, Bogor, 9 Maret 2004.

79. "Perlukah Perlindungan HaKI Bagi Negara Berkembang?" Lokakarya Terbatas Tentang Hak Kekayaan Intelektual Pusat Pengkajian Hukum (PPH) dan Pusdiklat Mahkamah Agung, 10-11 Februari 2004.
80. “Perkembangan Teknologi e-Learning.” Presented at Seminar and Workshop "Proses e-Learning di Perguruan Tinggi", TPB ITB, Bandung, 11 Desember 2003.
81. “Open Source vs. Commercial Software: an academic view.” Presented at Business Software Alliance Seminar, Hyatt, Jakarta, 14 November 2003.
82. “Membangung Konvektivitas Yang Berkualitas.” Presented at Ipteknet Seminar, Hotel Sari Pan Pacific, 23 October 2003.
83. “The Need for Disaster Recovery Center.” Presented at Hotel Mulia, 8 October 2003. Organized by t-inc.
84. “Perubahan Orientasi Penelitian di Perguruan Tinggi.” Presented at P4D, Ciwargua - Bandung, 15 September 2003.
85. “Jaringan Inovasi.” Presented at BPPT Seminar: "Reviving National Industry Through Technology and Business Innovation," BPPT, Jakarta. 26 August 2003.
86. “Teknologi VoIP.” Presented at the Law Faculty of Universitas Trisakti Jakarta, 29 Juli 2003.
87. "Peranan Teknologi Informasi Dalam Bisnis Kontemporer Lokal Yang Berorientasi Global". Presentation at "Seminar Bisnis Kontemporer Lokal Dalam Persaingan Global," 26 July 2003.
88. “Potensi Linux: Software untuk Pendidikan, Bisnis, dan Pribadi.” Presented at Bandung Linux Day 2003.
89. "Pelajaran Dari Mendirikan Perusahaan Startup. (Lessons learned from Starting-Up)". Presented at Lokakarya Pusat Inovasi LIPI, Bandung. 5 June 2003.
90. “Aspek Teknis Nama Domain.” Presented at Seminar "Memformat Arah Regulasi Internet Indonesia. Studi Kasus: Sengketa Nama Domain Mustika-Ratu.com". 20 May 2003.
91. “HaKI di bidang Teknologi Informasi: Peluang dan Hambatan.” Presented at LIPI Jakarta. 7 May 2003.
92. “Peluang dan Hambatan E-Commerce di Indonesia.” Presented at Seminar Akuntansi UTAMA 2003, Fakultas Ekonomi Universitas Widyatama, 3 May 2003.
93. “Menjembatani Kesenjangan Digital di Indonesia: Briding the Digital Divide.” Presented at Habibie Center, 14 January 2003.
94. “Pengamanan Cyber Banking: Memberikan keamanan dan kenyamanan nasabah”, presented at Cyber Banking Seminar, organized by Sekolah Tinggi Teknologi Indonesia, Holiday Inn, Bandung, 18 December 2002.
95. “Rancangan abc eBooks.” Presented at "Seminar Sehari: Kiat Menulis Buku dan Informasi Ilmiah," organized by Penerbit ITB Departemen Fisika ITB, at Aula Barat ITB, 20 August 2002.

96. “Cyber University, Teknologi Informasi, dan Perguruan Tinggi di Indonesia.” Presented at "Seminar Cyber University" organized by Universitas Winaya Mukti, Jatinangor, 19 Agustus 2002.
97. “Pemanfaatan Teknologi Informasi dalam Promosi Pariwisata.” Hotel Sawunggaling, Bandung. 21 June 2002.
98. “Intrusion Detection System,” presented at Inixindo Seminar, Holliday Inn, Bandung. 14 March 2002.
99. “Introduction to Network Security,” presented at Cisco Seminar, Shangri-La hotel, Jakarta. 13 March 2002.
100. “Prospek Penggunaan Open Source Untuk Skala Perusahaan,” Workshop at Risti, Bandung, 12 March 2002.
101. “Application Service Provider (ASP) security.” Presented at Seminar Nasional, ASP, Implementasi dan Implikasinya Terhadap Dunia Usaha Indonesia, University Center UGM, Infotech 2002, Yogyakarta, 6 February 2002.
102. “Tanggapan terhadap RUU Teknologi Informasi (Cyberlaw),” Holliday Inn, Bandung. 1 November 2001.
103. “E-Defense,” presented at Hankam, 29 October 2001.
104. “The Utopia of IP (Intellectual Property) Regulation in Indonesia," presented at TPE Connectivity, Jakarta, October 10, 2001.
105. "Ecommerce & Industri Kimia" presented at Seminar Nasonal & Pameran Industri Kimia 2001, organized by AMISCA, Aula Barat, ITB, September 24, 2001
106. “Aspek Teknologi dan Security dalam Internet Banking,” presented at “Internet Banking: Implementasi & Tantangan ke depan” seminar, organized by Banking Research and Regulation Directorate, Bank Indonesia, Jakarta, August 13, 2001.
107. Overview of Network Security, presented at End to End Secure Network Solution seminar, Hotel Aryaduta, Jakarta July 25, 2001.
108. Instructor for INDOCISC Hands On Network Security Workshop, Jakarta, 17-18 July 2001.
109. Security of Internet Banking, presentation in Hotel Papandayan, Bandung, organized by Faculty of Law UNPAD and Bank Bali, Bandung, 13 July 2001.
110. "Perkembangan Teknologi Informasi Serta Relevansinya Terhadap Kepentingan Nasional Indonesia", a presentation at Cyberlaw Seminar organized by Faculty of Law, Trisakti University, Jakarta, 12 July 2001.
111. Instructor for LAPI Executive Workshop, with focus on IT trends, Bandung, 11 July 2001
112. Presentation at Seminar Nasional Jaringan Komputer II, organized by Technic Study Club, STMIK Dipanegara Makassar. My presentation title is "Membangun E-Government", 19 May 2001.
113. Millenium Internet Roadshow Bandung, hotel Jayakarta, 3 May 2001.

114. “Bandung High Tech Valley,” presented at “Indonesia Tutorial on Information Technology,” Universitas Advent Indonesia, Bandung, 22 April 2001.
115. “Membangun Indonesia Melalui Teknologi Informasi,” presented at Indocomtech 2001, Hyatt, Bandung, 12 April 2001.
116. “The Future of .ID Domain Management,” presented at Domain Solusi Perdana (DSP) & Speednames partnership, Jakarta, 4 April 2001.
117. “Internet Security,” presented at "Seminar Sehari Aplikasi Teknologi Informasi dan Pemasaran", B4T, Bandung, 13 March 2001.
118. Multimedia, Internet and the future of it, presented at LPP Ariyanti, Bandung, 10 March 2001.
119. Talk at PUSTENA, Salman, ITB, "Pemanfaatan Teknologi Informasi Sebagai Media Dakwah, Bisnis, dan Pengembangan Budaya, 11 February 2001.
120. Microsoft discussion on Intellectual Property, 6 February 2001.
121. Talk show at the launching of Link.net in Yogyakarta, 17 January 2001.
122. Presentation on Bandung High Tech Valley at "Himpunan Mahasiswa Fisika Teknik" (Applied Physics Student Union), 18 November 2000.
123. Presentation at Bandung IT Expo 2000 (BITE 2000) and at PUSTEKKOM & SEAMOLEC & RISTI Teleconferencing Seminar, 15 November 2000.
124. Presentation at Sumpah Internet Pemuda (SIP) 2000, Diknas, Jakarta. Presented IT opportunities abroad, 28 October 2000.
125. “Internet in Indonesia,” presented at AMINEF (American Indonesian Exchange Foundation) Seminar, 19 October 2000.
126. “SDM-IT,” presented at Dept of Commerce Indonesia, Jakarta, 18 October 2000.
127. “Mengadopsi Pola Open Content,” presented 14 October 2000 at Lokakarya Peningkatan Proses Pembelajaran Dengan Pemanfaatan Teknologi Informasi, DUE-like project, TPB ITB.
128. “Routing Internet,” presented at SCOMDEX Surabaya, 12 October 2000.
129. "Into to BHTV (Bandung High Tech Valley)," presented 21 September 2000 at LAPI ITB Seminar, Bandung.
130. "Sekuriti belanja online," presented at the launching of GetEkstra.com, Jakarta, 12 September 2000.
131. "Challenges and Opportunities Facing Academic Institutions in Asia Pacific," invited keynote paper, presented at TACIT 2000, Bangkok, Thailand, 25 August 2000.
132. “Teritori di Cyberspace: Antara Virtualitas dan Realitas,” presented at Cyberlaw seminar “Regulasi Cyberspace di Indonesia”, Grand Hotel Preanger, Bandung, 29 July 2000.
133. “Beberapa Pemikiran Tentang E-Commerce,” presented at Cyberlaw seminar, Hotel Jayakarta, Bandung, 22 July 2000.

134. “Pengembangan SDM Industri Teknologi Informasi dan Software untuk BHTV,” presented at “Seminar Sekolah Kejuruan Menengah”, Cimahi, 21 July 2000.

135. “Peranan Linux dalam Pengembangan Sistem Informasi,” presented at Linux Seminar, Jakarta, 19 July 2000.

136. “Internet Business,” presented at Rotary club, Jakarta, 14 June 2000.

137. “Electronic Payment System,” presented at “Seminar Sehari – Pengembangan Aplikasi Internet dalam E-Commerce”, Hotel Menara Peninsula, Jakarta, 31 May 2000.

138. “Some Thoughts on e-Business” presented at the launching of bisik.com, organized by Suara Mahasiswa Universitas Indonesia, Depok, 17 May 2000.

139. “Beberapa Topik Keamanan Intranet & Internet (Issues on Intranet & Internet Security)” presented at National Seminar, “Sistem Operasi Jaringan Masa Depan” (Future Network Operating System), organized by Laboratorium Arsitektur dan Jaringan Komputer Teknik Informatika ITS, Surabaya, 13 May 2000.

140. Seminar Nasional Jaringan Komputer, “E-commerce Dan Otonomi Daerah Dengan Sistem Jaringan Komputer dan E-Commerce”, organized by Technic Study Club (TSC), STMIK Dipanegara, Makassar, South Sulawesi, 29 April 2000.

141. Open lecture, “Technopreneur,” at STMIK Dipanegara Makassar and at Electrical Engineering Students Org., Universitas Hasanuddin, Makassar, 28 April 2000.

142. “Secure Electronic Commerce,” presented at GE Indonesia E-Commerce workshop, Le-Meridien Hotel, 18 April 2000.

143. “Perkembangan Internet dan e-commerce” (Internet development and e-commerce), Program Pendidikan Lanjutan Ilmu Hkum (PPLIH), Fakultas Hukum (Law Faculty), Universitas Indonesa, 14 April 2000.

144. “Network Security in Indonesia,” APJII & ISS Security Seminar, MBICC, Jakarta Stock Exchange, 12 April 2000.

145. “Building Your Truly Secure Enterprise Network,” will be presented at Miller Freeman’s Indonesia Connectivity 1999 conference, Regent Hotel, Jakarta, 12 October 1999.

146. “Aplikasi IT untuk Usaha Kecil Menengah” (IT applications for Small and Medium Enterprises), presented at “Lokakarya Peranan IT Bagi Pengembangan IKM” (Workshop on Roles of IT in SME Development), Savoy Homan Hotel, Bandung, 25-26 September 1999.

147. “Keamanan dalam Electronic Commerce” (E-commerce security), presented at Infokomputer seminar, Jakarta, 31 August 1999.

148. "Meningkatkan Kinerja dengan menggunakan Linux," presented at Linux Seminar, Millenium Hotel, Jakarta, 10 August 1999.

149. “Linux OS Reformasi,” presented at “Linux & Open Source: Solusi Hemat, Tepat dan Andal,” 22 April 1999, Gedung Telkom, Jakarta.

150. "Millenium bug, Y2K," presented at Bandung Rotary Club meeting, Hotel Savoy Homan, 1999.

151. Speaker at PT Telekomunikasi Indonesia (Divisi Multimedia) electronic commerce seminar, "*Peluang dan Pemberdayaan Dunia Usaha Memasuik Era 'E-commerce' Melalui Kemitraan Bisnis Telkom*," Hotel Sahid, Jakarta, 1-2 December 1998. Topic: security

152. Presenter at PIKSI, ITB short course, "*Implementing Internet Security*," Sheraton Hotel Bandung, 24-26 November 1998.

153. Invited Lecturer at "*NEDO/BPPT International Seminar on Electronic and Information Technology*", Jakarta, 17 February 1998. Title of lecture "In Search for a Personal Assistant: a quest in managing our electronic junk."