

CV: Hary Gunarto

Education

Nov. 1978 Bachelor Degree, Electronics and Instrumentation, Gadjah Mada Univ, Indonesia
Jun. 1982 – Aug. 1984 Master Program, University of Wisconsin (USA)
Aug. 1984 Master Degree in Electrical and Computer Engineering
Sep. 1984 – Feb. 1988 Ph.D. Program, Washington State University (USA)
May 1988 Ph.D. Degree in Electrical and Computer Engineering

Final Education:	Washington State University (USA)
Degree:	Ph.D. in Electrical and Computer Engineering
Dissertation Title:	Token-based Protocol for Industrial FMS Computer Communication Networks

Work Experience

1986-1988 Research Assistant, Department of Electrical & Computer Engineering, Washington State University, USA.
1988-1989 Lecturer, Department of Electrical & Computer Eng., Washington State University, USA.
1990-1995 Head of Research and Development, Computer Center, Gadjah Mada University, Yogyakarta, Indonesia.
1992-1995 Library Automation Consultant, Direktorat Pendidikan Tinggi, Department of Education & Culture, Jakarta, Indonesia.
1992-1998 Head of Electronics and Instrumentation Laboratory, Faculty of Science and Math, Gadjah Mada University, Yogyakarta, Indonesia.
1989-1998 Associate Professor, Fac. Science & Math (MIPA), Gadjah Mada University, Indonesia.
1999-2000 Visiting Professor, King Fahd University, Dahrn, Saudi Arabia.
2000-2004 Associate Professor, College of Asia Pacific Studies, Ritsumeikan Asia Pacific University,
2004-2020 Professor, Graduate School of Asia Pacific Studies, Ritsumeikan Asia Pacific University
2005-2006 Vice chairman for Faculty and Staff Union, APU, Ritsumeikan Asia Pacific University
2020-2025 Emeritus Professor, Ritsumeikan Asia Pacific University, Japan
2025- Visiting Emeritus Professor, Ritsumeikan Asia Pacific University, Japan

Professional Research Association and Societies

1980/08~1998 Physics Society of Indonesia (HFI)
1982~2024 Institute of Electrical and Electronics Engineers (IEEE), USA
1985/05~1988 Association for Computing Machinery (ACM), USA
1992~1997 ICTP (International Centre for Theoretical Physics) - UNESCO. Research Associate, Italy
2007/04~2012 Scientific American, USA
Reviewer Institute of Electrical and Electronics Engineers (IEEE) Magazine, USA
Journal reviewer, Jurnal Jurusan Fisika Universitas Gadjah Mada, Yogyakarta, Indonesia
Journal Reviewer, International Journal of Manpower, Emerald Publishing Ltd, ISSN: 0143-7720, England

Honors & Awards

1975~1978 SUPERSEMAR Gadjah Mada Univ. Scholarship, Indonesia
1978/11 Academic Excellence, Faculty of Science & Math, Gadjah Mada Univ.
1982~1988 MUCIA Fellowship for Master & PhD programs in US
Aug. 1990 Excellence Teaching Awards from Education Ministry of Indonesia
Feb. 1999 Satyalancana Karya Satya Awards, President Republic of Indonesia
2020/04 Ritsumeikan Asia Pacific University Professor Emeritus, Japan

Research Publications

I Books

1. Gunarto, H. (1978), Interfacing & Building IC Circuits for PABX Automatic Telephone Central Systems, Undergraduate thesis, Gadjah Mada University, Indonesia.
2. Gunarto, H. (1984). Automatic Design of Minimum Pass-transistor Realizations of Switching Functions. Master project report, Univ. of Wisconsin-Madison, USA, August 1984.
3. Gunarto, H. (1988), Industrial Flexible Manufacturing Systems: Computer Communication Protocol, PhD dissertation, Washington State University, USA.
4. Gunarto, H. (1989). An industrial FMS communication protocol. UMI Microfilm Pub.: Michigan, USA, CiNii NCID: BA8594339X (ProQuest)
5. Gunarto, H. (1994). Numerical Methods for Simulation Modeling. Gadjah Mada University, Faculty of Science and Math. Printing, Yogyakarta.
6. Gunarto, H. (1996). Computerized Simulation Programs. Gadjah Mada University, Faculty of Science and Math. Printing, Yogyakarta.
7. Gunarto, H. (1997). Manajemen Produksi dan Operasi dengan Program Komputer. IPWI Pub. Co, Jakarta
8. Gunarto, H. (1998). Business Forecasting with Statistical Software. IPWI Pub. Jakarta.
9. Li, Y., Gunarto, H. et al. (2000). Visual Basic for Information Processing. Bunrindo Pub., Japan. ISBN: 4-939095-65-7
10. Gunarto, H. (2002). Learn Visual C++ for Information Processing. Andi Offset Pub., Yogyakarta, ISBN: 979-533-832-3
11. Gunarto, H. (2003). Introduction to Web Design Programming for E-Business and E-Commerce. Andi Offset Pub., Yogyakarta. ISBN: 9795339818.
12. Gunarto, H. (2004). Introduction to C++.Net and C#.Net with Simple Data Processing. Andi Offset Pub, Yogyakarta. ISBN: 9797312577
13. Gunarto, H. (2004). Kuliah Sambil Kerja di Negeri Sakura. Andi Offset Pub., Yogyakarta. ISBN. 9797313913.
14. Majumdar AAK & Hary Gunarto (2004). On Some Recurrence Type Smarandache Sequences, "Smarandache Notions Journal", American Research Press, USA, Book series, VOL 14, 2004, pp. 92-112. ISBN 1-931233-79-9
15. Gunarto, H. & P PuspitaSari (2005). Kuliah Sambil Kerja di Negeri Kanguru. Andi Offset Pub., Yogyakarta. ISBN: 979-763-029-3
16. Gunarto, H. (2006). Introduction to Visual Basic.Net Programming. Tech Publication, Singapore. ISBN-13: 978-981-214-174-3,
17. Gunarto, H. (2007). Collected Computer Programming Problems in Visual C#.Net. Tech Publication, Singapore. ISBN : 9789812141743.
18. Gunarto, H. (2017). Glossary of IT and Computer Terms: English - Indonesian-Malay. Tiara Wacana Publication, Yogyakarta. ISBN: 978-979-1262-45-3
19. Gunarto, H., Puspitasari, P. & Pribadi, M.B. (2018). Sukses Kuliah Sambil Kerja di Jerman & Swiss, Ar-Ruzz Media Pub. Company. Yogyakarta. ISBN: 978-602-3-13252-2,
20. Gunarto, H. (2019). Parametric & Nonparametric Data Analysis for Social Research: IBM SPSS. LAMBERT Academic Publishing, Riga. June 2019. ISBN: 978-620-0-11872-1
21. Gunarto, H. (2022). Kuliah Sambil Kerja di Negeri Jiran. Amazon Kindle Edition, ASIN : B0C4T3LZJ1
22. Gunarto, H. (2023). Introduction to Web Design Programming. Amazon KDP Publishing Co. May 2023. ISBN: 979-8390765753
23. Gunarto, H. (2023). Parametric & Nonparametric Statistics for Business & Social Research: IBM SPSS. Amazon KDP Publishing Co. June 2023. ISBN: 979-8386852528
24. Gunarto, H. & Marsha Pribadi (2023). Kuliah Sambil Kerja di Negeri Sakura. Amazon KDP Pub., ISBN. 979-8385700004
25. Gunarto, H. (2024). Book Chapter: 4. AI-based tech for voice recognition in Asian and Austronesian languages (in Elsevier: Artificial Intelligence-Empowered Modern Electric Vehicles in Smart Grid Systems). Elsevier Publishing Co. June 2024. ISBN: 978-0443238147
26. Gunarto, H. (2024). Glossary of IT and Computer Terms: English - Indonesian-Malay, 2nd edition, October 2024, Amazon KDP Publisher (paperback): 227 pages, ISBN: 979-8342814614

II. Articles

1. Gunarto, H. (1984). Automatic Design of Minimum Pass-transistor Realizations of Switching Functions. Project Report/paper, Univ. of Wisconsin-Madison, USA, August 1984.

2. Gunarto, H. & Chiang, Y.P. (1987). An Industrial FMS Communication Protocol. Sixth Annual International Phoenix Conference on Computers and Communications, Scottsdale, Arizona, USA, February 1987, pp. 531 - 535.
3. Gunarto, H. & Chiang, Y.P. (1987). An Industrial FMS Communication Protocol: Analytical Analysis. 30-th Midwest Symposium on Circuits and Systems, Syracuse, New York, USA, August 1987, pp. 120 - 123.
4. Gunarto, H. & Chiang, Y.P. (1987). Simulation of Factory Communication Protocols. Proc. of Simulation and Artificial Intelligence in Manufacturing, Society of Manufacturing Engineers, Long Beach, California, USA, October 1987, pp. 1.59 - 1.75.
5. Gunarto, H. (1988). Token-based Protocol for Industrial FMS Computer Communication Networks. ECE Department Seminar, Washington State University, USA, May 1988.
6. Gunarto, H. & Chiang, Y.P. (1988). A Priority Access Scheme for an Industrial and Factory Communication Network. International Conference on Communication Systems, ICCS 88, Singapore, Nov. 1-3, 1988, pp. 610 - 614.
7. Gunarto, H. (1989). A Bus-connected Pyramid Architecture for Image Processing Applications. IEEE Internat. Conference on Image Processing, ICIP 89, Singapore, 5-8 Sept. 1989, pp. 399 - 402.
8. Gunarto, H. (1990). Simulation of Digital Systems. Gadjah Mada Univ. Seminar, January 1990.
9. Gunarto, H. (1990). Protokol Komunikasi pada Jaringan Industri FMS. Majalah Ilmiah MIPA, Gadjah Mada Univ. No 3 th 2, pp. 1-13, December 1990.
10. Gunarto, H. (1990). Model Simulasi. Jurnal Jurusan Fisika, UGM No. 1, th 1, pp 10-24, Gadjah Mada University, Yogyakarta, May 1990.
11. Gunarto, H. (1991). Computer Simulation for Digital and Analog Circuits. OPF-FMIPA Research Seminar, Gadjah Mada Univ., January 1991.
12. Gunarto, H. (1991). Analisa Analitik dari Jaringan Komputer FMS. *Jurnal Jurusan Fisika UGM* No. 4, th 1, pp 92-107, Gadjah Mada University, Yogyakarta, January 1991.
13. Gunarto, H. (1991). Analisis Frekuensi Getaran Mekanis dengan Program Komputer. *Majalah Berkala Pasca Sarjana UGM*. Jilid 4 No 3B, pp 681-695, Gadjah Mada University, Yogyakarta.
14. Gunarto, H. (1992). Analog Circuits Analysis and Simulations. DPP-FMIPA Research Seminar. Gadjah Mada University, January 1992.
15. Gunarto, H. (1992). Komunikasi Data dan Jaringan Komputer Berbasis Unix. UPT Komputer Publication. pp 12-19, Univ. Gadjah Mada, Sept. 1992.
16. Gunarto, H. (1993). Database and Bar-coded Identification System for Library Automation. DPP SPP FMIPA Research Conference, Gadjah Mada Univ., March 1993.
17. Gunarto, H. (1993). Generation and Mathematical Modeling of Solitary Water Waves in a Channel. Gadjah Mada Univ. Seminar, September 1993.
18. Gunarto, H. (1993). Submitting Successful Research Proposals. Joint Research Project Seminar with AIDAP (Australia), Bali.
19. Gunarto, H. (1994). Digital Control Systems with Intel Micro controller Chip. Gadjah Mada Univ. Fac. of Science and Math Seminar.
20. Gunarto, H. (1995). Computerized Experimentations in Electronics and Instrumentations Lab. Gadjah Mada Univ, Fac. of Science and Math Seminar.
21. Gunarto, H. (1995). Mengarungi Lautan Informasi lewat Internet. Buletin Informatika, No 6/th I, pp.5-22, UKDW, Yogyakarta, February 1995.
22. Gunarto, H. (1996). Parallel Image Processing of Remote Sensing Data. Univ. Gadjah Mada Scientific Meeting.
23. Gunarto, H. (1998). Security and Ethical Challenges in IT & Computer Comm. Networks. Computa Executive College Conference, Hotel Syantika, Yogyakarta, October 1998.
24. Gunarto, H. & Umeda, C. (2000). Computer Aided Instructions for Japanese Language Class. Ritsumeikan APU Research Presentation.
25. Majumdar, A.A.K. & Gunarto, H. (2001). The Theoretical and Computational Aspects of the Classical Tower of Hanoi Problem and its Generalizations. Ritsumeikan APU Research Seminar.
26. Gunarto, H. (2003). Security and Ethical Concerns on the Internet. *Journal of Ritsumeikan Studies in Language and Culture*. Vol. 15, No.1. Kyoto, June 2003, pp. 71-76.
27. Majumdar, A.A.K. & Gunarto, H. (2010). On Some Recurrence Type Smarandache Sequences. Smarandache Notions Journal, American Research Press in USA Book series, VOL 14, 2004, pp. 92-112.
28. Gunarto, H. (2004). Research in Science and Technology as Basic Industrial Activities for Economic Recovery. Buletin Informatika Vol 4 No.1, pp. 14-19, Univ Dutawacana, Yogyakarta, Indonesia.
29. Majumdar, A.A.K., Gunarto, H. et al. (2004). The Stable Marriage Problem: A New Algorithm. The Chittagong University Journal of Science, Vol. 28, No 2, page 7-25, July 2004.
30. Gunarto, H. (2004). Building Dictionary as Basic Tool for Machine Translation in Natural Language Processing Applications. *Journal of Ritsumeikan Studies in Language and Culture*. VOL 15, No 3, Kyoto, February 2004, pp. 177-185.
31. Majumdar, A.A.K. & Gunarto, H. (2004). On the Smarandache Pierced Chain Sequence. Journal of

- Berkala MIPA, Vol. 14 No.2, May 2004, pp 103-108.
32. Gunarto, H. (2007). Preserving Borobudur's Narrative Relief Wall of UNESCO Cultural World Heritage. RCAPS web publication: Occasional Paper, October 2007, www.apu.ac.jp/rcaps.
 33. Gunarto, H. (2007). Digital Preservation of Borobudur World Heritage and Cultural Treasures. *Journal of Ritsumeikan Studies in Language and Culture*, VOL 19, No 2, Kyoto, Nov. 2007, pp. 263-278.
 34. Majumdar, A.A.K. & Gunarto, Hary (2010). A Note on Smarandache Number Related Triangles. *Scientia Magna*, Volume 6, No. 1, pp.1- 6.
 35. Gunarto, H. (2019). Apps-based Machine Translation on Smart Media Devices - A Review. *IJCCS (Indonesian Journal of Computing and Cybernetics Systems)*, Gadjah Mada University. January 2019. Vol. 13 No. 1. pp. 95-104.
 36. Gunarto, H. (2019). UNESCO Cultural Heritages and Symbol of Indonesian Peace and Religious Harmony. *International Journal of Current Multidisciplinary Studies*. VOL. 5 Issue: 5(A). May 2019. pp. 993-997.
 37. Islam, S., H. Gunarto & AAK. Majumdar (2021). On the Sandor - Smarandache Function. *Journal of Scientific Research* 13 (No 2), pp. 439-454.
 38. Gunarto, H., SMS Islam & AAK. Majumdar (2022). Palindromes in Some Smarandache-Type Functions. *Jurnal Matematika MANTIKA*. June 2022. Vol. 8 (1), pp. 1-9.

III Translation None

IV Research Report

1. Gunarto, H. & Hsu, C.S. (1988). Hankel Matrix Problems in Airplane Control Systems. Research report: Boeing Airplane Company, Seattle, USA.
2. Gunarto, H. (1991), Analog Circuits Analysis and Simulations, Research report, Gadjah Mada Univ. Indonesia.
3. Gunarto, H. (1995). Computer-controlled Experiments in Instrumentations Lab. Gadjah Mada University research report, Fac. of Science and Math, Yogyakarta. Indonesia.
4. Gunarto, H. (1998), Parallel Image Processing of Remote Sensing Data, Research report, Gadjah Mada Univ. Indonesia.
5. Gunarto, H. (2000), Latest ICT in ASEAN Countries, Research report, Ritsumeikan Asia Pacific Univ. Japan.
6. Gunarto, H. & Nagamatsu Toshifumi (2001). Information and Communication Technology (ICT) in Japan, Kakenhi Japan Ministry of Education, Research report.
7. Gunarto, H. & Majumdar, A.A.K. (2003). On the Smarandache Sequence Numbers. Research report. RCAPS Ritsumeikan APU.
8. Gunarto, H. (2007). Efforts towards Digital Preservation of Borobudur World Heritage and Cultural Treasures. ADL Research report, April 2007. Ritsumeikan Asia Pacific Univ. Japan.
9. Gunarto, H. & Unetani, T. (2008). Design & Implementation of Synchronous Communication Technique for Japanese Language Class Support. Kakenhi Monbusho/Japan Ministry of Education Research Report, March 2008.
10. Gunarto, H. (2013). Cultural Heritage Sites of Indonesia: Borobudur and Prambanan Temples. ADL report, Oct. 2013. Ritsumeikan Asia Pacific Univ. Japan.
11. Gunarto, H. (2020). Indonesian and Austronesian Languages. Individual research report, 30 March 2020. Ritsumeikan Asia Pacific Univ. Japan.

V. Presentations at Academic Conference

1. Gunarto, H. (1981). Microprocessor Applications in Instrumentations. Annual Symposium on Physics and Instrumentations, Indonesian Physical Society, Indonesia.
2. Gunarto, H. & Chiang, Y.P. (1987). An Industrial Communication Protocol. Sixth Annual International Phoenix Conference on Computers and Communications, Scottsdale, USA pp.531-535.
3. Gunarto, H. & Chiang, Y.P. (1987). An Industrial FMS Communication Protocol: Analytical Analysis. 30-th Midwest Symposium on Circuits and Systems, Syracuse, USA.
4. Gunarto, H. & Chiang, Y.P. (1987). Simulation of Factory Communication Protocols. Society of Manufacturing Engineers Conference, Long Beach, USA.
5. Gunarto, H. & Chiang, Y.P. (1988). A Priority Access Scheme for an Industrial and Factory Communication Network. International Conference on Communication Systems, Singapore International Conference on Communication Systems.
6. Gunarto, H. (1988). Computer Networks in an Automated Factory. Department Seminar & Presentation, Department of Electrical and Computer Engineering, Washington State University,

USA.

- 7 Gunarto, H. (1989). A Bus-connected Pyramid Architecture for Image Processing Applications. IEEE International Conference on Image Processing, Singapore.
- 8 Gunarto, H. (1989). Jaringan LAN Sebagai Sarana Kantor yang Terintegrasi. Computer Seminar, Ambarukmo International Hotel, Yogyakarta. 17 Sept. 1989
- 9 Gunarto, H. (1989). Teknologi Komputer dan Manfaatnya untuk Dakwah, Seminar Komputer Sehari, FMIPA, Univ. Gadjah Mada, Yogya, 12 Nov. 1989
- 10 Gunarto, H. (1990). Pemodelan dan Simulasi Dalam Fisika, Pertemuan Ilmiah HFIY, Semarang, Indonesia, 6 January 1990.
- 11 Gunarto, H. (1990). Penggunaan Metode Simulasi Komputer Dalam Usaha Pengembangan Bidang Fisika. Pekan Fisika 90, HIMA FISIKA FMIPA ITS Surabaya, Indonesia, 5-8 March 1990 .
- 12 Gunarto, H. (1991). Peranan Riset Fisika Dalam Pengembangan Teknologi Indonesia pada Masa Mendatang, Srawung Ilmiah, FPMIPA IKIP, Yogyakarta, 3 December 1991
- 13 Gunarto, H. (1991). Basic VLSI Design Techniques, International Centre for Theoretical Physics, Trieste, Italy, 9 March 1991
- 14 Gunarto, H. (1992). Pengembangan Jaringan Bibliografi sebagai Bagian dari Sistem Informasi Perpustakaan. UKKP Seminar, DIKTI, Jakarta, February 1992.
- 15 Gunarto, H. (1992). Pengenalan dan Aplikasi LAN di Lingkungan Industri dan Laboratorium. Seminar Komputer, BATAN, Yogyakarta, September 1992.
- 16 Gunarto, H. (1993). Evaluation on Higher Education Information Systems, Nusa Cendana University, SIMES-DIKTI, Kupang, 1993
- 17 Gunarto, H. (1993). Data Collection on Higher Education Databases, Andalas Univ., Padang, 1993
- 18 Gunarto, H. (1993). Higher Education Databases, Lambung Mangkurat Univ., SIMES, Banjarmasin, 1993
- 19 Gunarto, H. (1993). How to Write & Submit a Successful Research Proposals. Joint Research Project Seminar with AIDAP (Australia), Bali, January 1993.
- 20 Gunarto, H. (1994). Parallel Processing and its Applications in Physics, International Centre for Theoretical Physics, Trieste, Italy, 30 September 1994
- 21 Gunarto, H. (1994). Microprocessor-based Real-time Control: Principles and Applications, International Centre for Theoretical Physics, Trieste, Italy, 1 October 1994
- 22 Gunarto, H. (1994). Hardware and Software Requirements for Library Automation. Seminar for Library Automations, DIKTI, Jakarta, November 1994.
- 23 Gunarto, H. (1994). Jaringan Komputer untuk Lingkungan Industri. Seminar DLR-LAPAN, Jakarta, November 1994.
- 24 Gunarto, H. (1994). Pengaruh Metode Simulasi Komputer Dalam Usaha Pengembangan Bisnis. Seminar Program MM, Sekolah Tinggi Ilmu Ekonomi IPWI, Jakarta.
- 25 Gunarto, H. (1995). Ultrafast Transmission & Communications in Optical Fibres, International Centre for Theoretical Physics, Trieste, Italy, 12 February 1995
- 26 Gunarto, H. (1995). Sistem Informasi Perpustakaan, Pelatihan SUDR- Basic Science, LPM Univ. Gadjah Mada, Yogyakarta, October 1995.
- 27 Gunarto, H. (1995). Jalan Raya Data sebagai Sarana Akses Layanan Internet, Fak. Teknologi Industri, Univ. Atmajaya Yogyakarta, 18 November 1995.
- 28 Gunarto, H. (1995). Internet Sebagai Sarana Komunikasi Global. STI AKPRIND, Yogyakarta .
- 29 Gunarto, H. (1996). Peranan Internet Dan Layanan WWW dalam Mendukung Perkembangan Dunia Bisnis di Indonesia Menjelang abad-XXI. Program MM, Sekolah Tinggi Ilmu Ekonomi IPWI, Jakarta.
- 30 Gunarto, H. (1996). Global Networks. Workshop on National Computer Networking, Computa Executive College Seminar, Syantika Hotel, Yogyakarta.
- 31 Gunarto, H. (1996). Network Security. Workshop on National Computer Networking, Computa Executive College Seminar, Syantika Hotel, Yogyakarta.
- 32 Gunarto, H. (1997). Riset dalam Bidang Fisika dan Pengembangan MIPA, FMIPA-IKIP Yogyakarta-JICA, February 1997
- 33 Gunarto, H. (1997). Java Language and http Web Servers. Computa Executive College Seminar, Syantika, Yogyakarta, December 1997.
- 34 Gunarto, H. (1998). Indonesian Archipelagic, N-2001 Data Super-highway. ICTP & International Telecommunication Union, Trieste, Italy. 14 January 1998
- 35 Gunarto, H. (1998). Conference on Mathematics and Economics. ICTP & International Telecommunication Union, Trieste, Italy. 25 September 1998
- 36 Gunarto, H. (1999). Security and Ethical Challenges in Information Technology, Computa Executive College, Syantika, Yogyakarta, October 1999.
- 37 Gunarto, H. & Umeda (2000). Computer Aided Instructions for Japanese Language Class, Ritsumeikan APU Japan, 2000
- 38 Majumdar AAK & Gunarto, H. (2001). The Theoretical and Computational Aspects of the Classical

- Tower of Hanoi Problem and its Generalizations, Ritsumeikan APU, 2001,
- 39 Gunarto, H. (2002). Computer Skills in the Global Information Age, Ritsumeikan Asia Pacific University (APU), Japan, May 2002.
 - 40 Gunarto, H. (2003). Ethical Issues in Cyberspace and IT Society. Symposium on Whither the Age of Uncertainty, APU, January 2003.
 - 41 Gunarto, H. (2003). Natural Language Processing: Efforts and Challenges, Ritsumeikan Center for Asia Pacific Studies (RCAPS) Seminar, April 2003.
 - 42 Majumdar, AAK & Gunarto, H. (2004). Stable Marriage Problem & Algorithm, Ritsumeikan Center for Asia Pacific Studies (RCAPS) Seminar, July 2004.
 - 43 Gunarto, H. & Usuman, I. (2007). Communication Protocol for Robotic Arm in Nuclear Power Plants. JIP Conference. 2nd Jogja International Physics Conference, 6-8 September 2007.
 - 44 Gunarto, H. (2007). Preserving Borobudur's Narrative Walls of UNESCO Cultural World Heritage. Ritsumeikan Center for Asia Pacific Studies (RCAPS) Seminar, APU, 10 October 2007.
 - 45 Gunarto, H. (2011). Digital Preservation of World Heritage. AGORAsia workshop and UNESCO teleconference. Jakarta, 12 December 2011.
 - 46 Gunarto, H. (2011). Japanese Educational and Research Systems. Guest Speaker on Public Lecture & Seminar, Jurusan IKE, Gadjah Mada University, Indonesia, 29 Dec. 2011.
 - 47 Gunarto, H. (2012). Indonesian World Heritage Sites: Ancient Prambanan and Borobudur Temples. Ritsumeikan Center for Asia Pacific Studies (RCAPS) Seminar, APU, 29 June 2012.
 - 48 Gunarto, H. (2016). e-Society challenges: IoT Devices, Digital Media and Smart Information Services. 14th AP Conference, Ritsumeikan APU Univ, 5 Nov. 2016.
 - 49 Gunarto, H. (2017). Digital Preservation Projects on UNESCO Cultural Heritage Sites in Indonesia. 15th AP Conference, Ritsumeikan APU Univ, 12 Nov. 2017.
 - 50 Gunarto, H. (2020). Frontier Science in Computer and Electronic Technology. Invited speaker Gadjah Mada University. Nov. 2020.
 - 51 Gunarto, H. (2024). AI-based Speech Recognition Technology for Asian & Austronesian Languages, Asia Pacific Conference 2024, Ritsumeikan APU University, 30 Nov. 2024.

VI. Other (Invited presentation)

1. Gunarto, H. (1988). Computer Networks in an Automated Factory, ECE department, Washington State Univ. 13 October 1988
2. Gunarto, H. (1989). Teknologi Komputer dan Manfaatnya untuk Dakwah, Seminar Komputer Sehari, FMIPA, Univ. Gadjah Mada, Yogyakarta, 12 Nov. 1989
3. Gunarto, H. (1990). Pemodelan dan Simulasi Dalam Fisika, Pertemuan Ilmiah HFTY, Semarang, Indonesia, 6 January 1990.
4. Gunarto, H. (1990). Penggunaan Metode Simulasi Komputer Dalam Usaha Pengembangan Bidang Fisika, Pekan Fisika 90, HIMA FISIKA FMIPA ITS Surabaya, Indonesia, 5 March 1990.
5. Gunarto, H. (1991). Peranan Riset Fisika Dalam Pengembangan Teknologi Indonesia pada Masa Mendatang, Srawung Ilmiah, HIMA FISIKA FPMIPA IKIP, Yogyakarta, 3 December 1991
6. Gunarto, H. (1992). Pengembangan Jaringan Bibliografi sebagai Bagian dari Sistem Informasi Perpustakaan, UKKP, DIKTI, Ministry of Education, Jakarta, 12 February 1992.
7. Gunarto, H. (1992). Teori Jaringan Komputer, Univ. Kristen Immanuel, Yogya, 25 June 1992
8. Gunarto, H. (1992). Pengenalan dan Aplikasi LAN di Lingkungan Industri dan Laboratorium, Seminar Komputer, BATAN, National Atomic Energy Agency, Yogyakarta, 2 September 1992
9. Gunarto, H. (1993). How to Write & Submit a Successful Research Proposals, Joint Research Project with AIDAP (Australia), Udayana Univ., Bali, 10 January 1993
10. Gunarto, H. (1993). Higher Education Databases, Lambung Mangkurat Univ., SIMES, Banjarmasin, 11 Maret 1993
11. Gunarto, H. (1993). Data Collection on Higher Education Databases, Andalas Univ., Padang, 1993
12. Gunarto, H. (1993). Evaluation on Higher Education Information Systems, Nusa Cendana University, SIMES-DIKTI, Kupang, 30 August 1993
13. Gunarto, H. (1994). Jaringan Komputer untuk Lingkungan Industri, Seminar DLR-LAPAN, Jakarta, November 17 1994.
14. Gunarto, H. (1994). Pengaruh Metode Simulasi Komputer dalam Usaha Pengembangan Bisnis, Program MM, STIE IPWI, Jakarta, 20 December 1994.
15. Gunarto, H. (1995). Jalan Raya Data sebagai Sarana Akses Layanan Internet, Fak. Teknologi Industri, Univ. Atmajaya Yogyakarta, 18 November 1995.
16. Gunarto, H. (1995). Peranan Jaringan Komputer dalam Era Globalisasi Menyongsong Abad XXI, Univ. Sanata Dharma, Yogyakarta, 13 December 1995.
17. Gunarto, H. (1996). Pengembangan Jaringan Internet untuk Keperluan Pendidikan Tinggi, AMIK Wirasetya Mulya, Yogyakarta, 2 October 1996.
18. Gunarto, H. (1998). Security and Ethical Challenges of Information Technology, Computa

- Executive College, Syantika Hotel, Yogyakarta, 25 October 1998.
19. Gunarto, H. (1999). Operation Management and Statistics, Institut Bisnis dan Informatika Indonesia (IBII) Kwik Kian Gie, Univ. Jakarta, 14 July 1999.
 20. Gunarto, H. (2007). Preserving Borobudur's Narrative Relief Wall of UNESCO Cultural World Heritage, RCAPS Seminar, Ritsumeikan Asia Pacific Univ. Japan, 15 October 2007
 21. Gunarto, H. (2011). Digital Preservation of World Heritage. Guest speaker on AGORAsia teleconference, UNESCO, Jakarta, Indonesia, 12 December 2011.
 22. Gunarto, H. (2016). Smart Government and Digital Economy. Guest speaker at Computer Science department, Gadjah Mada University, Indonesia, 20 August 2016.
 23. Gunarto, H. (2020). Frontier Science in Computer and Electronic Technology, Guest lecture at Computer Science department, Gadjah Mada University, Indonesia, 26 Nov. 2020.

Teaching Experience

1. Undergraduate

- | | |
|-------------------|--|
| Apr. 2000 - 2004 | Associate Professor, College of Asia Pacific Studies, Ritsumeikan APU Univ.
Subject: Computer Programming. |
| Apr. 2004 - 2018 | Professor, College of Asia Pacific Studies, APU
Subject: DBMS, IT & Media Technology. |
| Oct. 2018 - 2020 | Professor, College of International Management, APU
Subject: Technology and New Media, Database Systems. |
| April 2020 - 2025 | Professor Emeritus, College of International Management, APU
Subject: Technology and New Media, Database Systems. |

2. Graduate

- | | |
|-------------------|--|
| Apr. 2003 - 2004 | Associate Professor, Graduate Schools of Asia Pacific Studies, APU
Subject: Computer Skills |
| Apr. 2004 - 2020 | Professor, Graduate Schools of Asia Pacific Studies, APU
Subject: Information Technology and Operation Management,
Information Resources and Data Analysis |
| April 2020 - 2025 | Professor Emeritus, College of International Management, APU
Subject: Quantitative Analysis & Statistics (Data Analytics). |

3. Overseas (Outside Japan)

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| 1988-1989 | Lecturer, Department of Electrical & Computer Eng., Washington State University, USA.
Subjects: Digital and Logical Systems, Computer Architecture |
| 1989-1996 | Assistant Professor, Instrumentation & Physics Department, Gadjah Mada University, Yogyakarta, Indonesia. Subjects: Digital and Logical Systems, Computer Architecture, Statistical Data Processing. |
| 1996-1998 | Associate Professor, Instrumentation & Computer Science Department, Gadjah Mada University, Yogyakarta, Indonesia. Subjects: Computer Networks, Computer Architecture, Digital and Logical Systems, Computer Programming Languages |
| 1999-2000 | Visiting Professor, King Fahd University of Petroleum & Minerals, Dahrn, Saudi Arabia.
Subject: Digital and Logical Systems |

4. Part-time:

Undergraduate Visiting Professor/Lecturer

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| 1991-1995 | Guest Lecturer at Information Technology/Engineering Department, STIE AKPRIND, Yogyakarta, Indonesia. Subject: Computer Communications. |
| 1991-1998 | Eresha School of Information Technology, Program Studi Magister Komputer STTI Benarif Indonesia (STTI BI), Subject: Computer Communications. |
| 1992/6-1992/9 | Guest Lecturer, Pattimura University, Ambon. Subject: Computer & Basic Science |
| 1992-1995 | AKAKOM (Universitas Teknologi Digital Indonesia), Yogyakarta, Subject: Computer Communications. |
| 1992-1997 | Guest Lecturer at PPT-MIGAS, Department of Mining and Energy, CEPU, Subject: ICT. |
| 1996-1997 | Sahid University, Jakarta. MBA Program. Subject: Business Operation Management |
| 1993-1998 | Guest Lecturer, UKDW University, Yogyakarta, Subject: Computer Communications |