

CIRRICULUM VITAE

NAME Ganbold GANCHIMEG, Ph.D

ADDRESS School of Information and Communication Technology,
Mongolian University of Science and Technology
22th khoroo, Bayanzurkh district, 13341, Ulaanbaatar,
Mongolia, Postal: 51-29
Mobile: +976-91199202
E-mail: ganaa@must.edu.mn



EDUCATION 2019-06-08, Associate Professor, Mongolian University of Science and Technology
2010-2015, Ph.D in Information technology, Mongolian University of Science and Technology, Doctor Thesis: “Multimedia Data Processing in Cultural Heritage”
2003-2005, Master of Science Degree in Software engineering, Mongolian University of Science and Technology, Master Thesis: “Theoretical study of methodologies for scheduling of training courses”
1998-2002, Bachelor’s Degree in Information Technology and Mathematics teacher, State Pedagogical University, Ulaanbaatar, Mongolia

TEACHING COURSES & Mathematics I, II, III, Programming language I, II, Data structure, Algorithm programming C++, Web programming, master courses

RESEARCH INTERESTS Image processing, pattern recognition, remote sensing, computer vision and traffic congestion solutions, multimedia and interactive technology, machine learning methods, high education management

EMPLOYMENT BACKGROUND September 2023 – Up to present, Associate Professor, School of Information and Communication Technology, Mongolian University of Science and Technology (MUST)
August 2019 – September 2023, Senior lecturer and Associate Professor, School of Information and Communication Technology, Mongolian University of Science and Technology (MUST)
February 2015 – August 2019, Senior lecturer, Open Education Center, Mongolian University of Science and Technology (MUST)
August 2002 – February 2015, Lecturer and senior lecturer, School of Mathematics, Mongolian University of Science and Technology (MUST)

RESEARCH & DEVELOPMENT ACHIEVEMENTS BOOK CHAPTERS

1. Flash MX programming handbook, 2006, Press of “Shorkhon shar”, UB, Mongolia
2. C++ programming language, 2011, Press of “Soymbo”, UB, Mongolia /copyright certificate /
3. Data structure handbook, 2015, Press of “MUST”, UB, Mongolia
4. Algorithm and programming, 2017, Press of “MUST”, UB, Mongolia /copyright certificate /, ISBN 978-99978-2-0549
5. Information technology examination handbook, 2018, Press of “MUST”, UB, Mongolia

6. R.Turbat, G.Ganchimeg, etc., "Use of Information technology I" Laboratory works handbook, 2019, "MUST" press, UB
7. R.Turbat, G.Ganchimeg, etc., "Use of Information technology I" Lecture slides handbook, 2019, "MUST" press, UB
8. Algorithms and C++, 2019, "MUST" press, UB, B5x30, ISBN 978-9919-22-111-9, (*basic university textbooks in electronic and paper versions*)

JOURNAL ARTICLES

1. G.Ganchimeg, Helmut. L, "Fingerprint Image Enhancement using Filtering Techniques", International Journal of Advanced Research (IJAR), Vol.7, №5, pp.637-645, 2019, ISSN: 2320-5407
2. G.Ganchimeg, Helmut. L, "A Study of History Document Fingerprint Image Enhancement and Tinning Algorithm", International Journal of Advanced Research in Science, Engineering and Technology, Vol.6, №3, pp. 8338-8345, 2019
3. G.Ganchimeg, Chasia. A.S," Comparison between Possibilistic c-Means (PCM) and Artificial Neural Network (ANN) Classification Algorithms in Land use/ Land cover", International Journal of Knowledge Content Development & Technology, Vol.7, №1, pp. 55-78, 01/03/2017, IF 1.35, **best paper awards**
4. G.Ganchimeg, "History Document Image Background Noise and Removal Methods", International Journal of Knowledge Content Development & Technology, Vol.5, №2, 01/05/2015, pp. 11-24, IF 1.35, **best paper awards**
5. G.Ganchimeg, "History Document Image Processing", Journal of scientific transactions, MUST, 19/06/2015, pp. 62-67
6. G.Ganchimeg, R.Turbat, "Image processing development and 3D printing technology", Journal of scientific transactions, MUST, 20/03/2015, pp.189-191, № 07/170
7. G.Ganchimeg, R.Turbat, "Detection of Edges in Color Images", Journal of IEEK Transactions on Smart Processing and Computing, Vol.3, №6, Dec30, 2014, pp. 345-352
8. G.Ganchimeg, "Image processing methods", Journal of scientific transactions, MUST, 2013, pp.165-171, № 14/147, 15/11/2013
9. G.Ganchimeg, "Multimedia system's application", Bileg Journal of Information Technology, Ulaanbaatar, Mongolia, 2008, pp. 30-31 /11/
10. G.Ganchimeg, "WLAN system", Bileg Journal of Information Technology, Ulaanbaatar, Mongolia, 2006, pp. 15-16. /09/36/
11. G.Ganchimeg, B.Sukhbaatar, "Introduction of M_Learning based on Mobile communication system and about making contents", Journal of scientific transactions, MUST, 2006, pp. 184-194.
12. G.Ganchimeg, "Theoretical study of methodologies for scheduling of training course", Journal of scientific transactions, MUST, 2006, pp. 129-137.

INTERNATIONAL REFERENCES

- Cited 40 times as of March 5, 2024. The link is:

<https://scholar.google.com/citations?hl=en&user=6Kra8LgAAAAJ>

CONFERENCE PAPERS AND PRESENTATIONS

1. B.Khulan, G.Ganchimeg, "*Test automation and choice of tools*", SICT-2023, Scientific Transactions, MUST, No.24(02), 326, e-version, pp.39-42
2. N.Sukhtumur, G.Ganchimeg, "*Deep reinforcement learning, stock trading, proximal policy optimization*", Students of MUST 2023 Conference, №23(17)323, Mongolia, **best article awards**, pp.220-223
3. G.Ganchimeg, N.Sukhtumur, "*Enhance business operations through the utilization of artificial intelligence*", Graduate School of Business 2023 Conference, Mongolia, **best article awards**, pp.
4. G.Ganchimeg, S.Jargalsuren, "*Comparative study of using unstructured data of MS-SQL and NO-SQL databases*", MMT-2023, pp. 124-126
5. G.Ganchimeg, A.Davaasuren, "Some results of the development of heat sensing drone", MMT-2023, pp. 120-123
6. G.Ganchimeg, N.Sukhtumur, "*Development of School Admission and Inquiry Chatbot*", Professors, Teachers and Researchers“, Academic Conference-2023” Scientific Transactions, MUST, No.23(03), 309, **best article awards**, pp. 43-46
7. B.Zagdsuren, G.Ganchimeg, "*Security of cloud technology*", SICT-2023, Scientific Transactions, MUST, No 23(12), 318, e-version, pp. 59-62
8. T.Otgonbayar, G.Ganchimeg, "*Study of the security of the supply chain of the developing program*", Scientific Transactions, MUST, No.24(02), 326, e-version, pp. 29-33
9. A.Erhemsaikhan, G.Ganchimeg, "*Usage of Mongolian building information system*", Scientific Transactions, MUST, No. 23 (12), 318, e-version, pp. 69-72
10. Ganchimeg, B.Gandiimaa, "*Research on optimization of athlete assessment based on sports data by deep learning method*", Current level of sports science in Mongolia and development of modern sports science conference 2022, **best article awards**, pp. 42-49
11. G.Ganchimeg, "*Methodology for creating educational presentation materials*", Engineering Education in Mongolia 2022, Theory and Practice Conference, pp. 24-33, 23-05-2022
12. G.Ganchimeg, Sh. Tsooj, S. Delgermaa, "*Research on methods of processing electronic survey data using the Sure model and SPSS program*", Electronic Nation 2021 Conference, 06-17-2021, pp. 502-511, **best article awards**
13. G.Ganchimeg, D.Bat-Erdene, "*Issues of implementing e-government*", E-Nation 2021 Conference, 06-17-2021, pp. 273-278
14. G.Ganchimeg, Ch. Erdenechuluun, "*Research on the development of web pages for online job placement*", MUST, 03-22-2021
15. G.Ganchimeg, "*Face detection methods*", MUST, 2020/2021, pp. 76-81
16. G. Ganchimeg, D. Bat-Erdene, "*Problems of optimal use of the capacity of the airways*", 2020 Mongolian Engineers Association, 12-24-2020, pp. 53-61
17. G. Ganchimeg, T. Batjargal, "*Study of the possibility of using light aircraft to combat natural disasters in Mongolia*", MUST, 2019/2020, No. 11/271, pp. 57-68
18. G.Ganchimeg, M. Tserendolgor, "*Study of Factors Affecting the Truth of Printed Products*", MUST 2019, No. 28/256, pp. 169-173, ISSN 1560-8794
19. G.Ganchimeg, E. Densmaa, "*Methodology for preparing course content using learning models and technology*", MUST 2019, No. 28/256, pp. 160-168, ISSN 1560-8794

20. G.Ganchimeg, D.Badarch, D.Tumenbold, "*Instructional design*", Open Education magazine, issue June 2019, <http://online.fliphtml.com/tome/wtkf/#p=22>, pp. 1-22
21. G.Ganchimeg, "*Possibility study of mining operations by remote sensing*", Conference on Mongolian Information Technology, MMT 2019, pp. 74-80
22. G.Ganchimeg, "*Some issues that can be introduced in public transport*", Urban transport development trends conference, 2019, pp. 46-51
23. G.Ganchimeg, Helmut.L, "*Vision Based Vehicle Monitoring at Road Intersections*", The 17th International Conference on Electronics, Information, and Communication (ICEIC 2018), Jan 24, 2018, pp. 157-160
24. G.Ganchimeg, "*Site management system*", International Online Conference IMT 2018, UB, Mongolia, 21/05/2018, pp.152-155
25. G.Ganchimeg, Helmut.L, "*Survey of vehicle detection methods*", *The 12th International Forum on Strategic Technology*, June 01, 2017, pp. 153-156
26. G.Ganchimeg, "*Image classification techniques in remote sensing*", International Online Conference, Information and Media Technology-IMT 2016, 18 May, Ulaanbaatar, Mongolia, pp. 112-117
27. G.Ganchimeg, B.Gantulga, "*Remote sensing of Zaamar mine Central province, Mongolia*", International Online Conference, Information and Media Technology-IMT 2016, 18 May, Ulaanbaatar, Mongolia, pp. 118-121, **best article awards**
28. G.Ganchimeg, Ts.Tuvshintulga, "*Uliin Am processed Remote Sensing of restored mine Arkhangai province, Mongolia*", International Online Conference, Information and Media Technology-IMT 2016, 18 May, Ulaanbaatar, Mongolia, pp. 122-127
29. G.Ganchimeg, "*Digital Image Processing Techniques for Object Detection and Shape Matching*", Conference on Mongolian Information Technology, MMT 2016, pp. 167-172, Mongolia, 06/05/2016
30. G.Ganchimeg, "*Обработка монгольской текстовой информации*", The 3rd Russian & Mongolian Conference for Young Scientists on Mathematical Modeling, Computing Technologies and Control 2015, June 30, 2015, pp.25-31
31. G.Ganchimeg, "*Image edge detection algorithm for linear and parametric model*", Conference on Mongolian Information Technology, MMT 2015, pp. 127-131, Mongolia, 01/05/2015
32. G.Ganchimeg, R.Turbat, "*Color Edge Detection with The Linear Fitting Algorithm*", The 5th International Conference on Creative Science and Technology ICICT-2014, MUSTAK, pp. 241-245, 10/05/2014
33. G.Ganchimeg, "*Comparison of Image Edge Detection Techniques*", The 5th International Conference on Creative Science and Technology ICICT-2014, MUSTAK 2014, pp. 236-240, 11/05/2014
34. G.Ganchimeg, "*Research of multimedia data processing methodology*", Conference on Mongolian Information Technology, MMT 2014, pp. 206-212, Mongolia, 08/05/2014
35. G.Ganchimeg, R.Turbat, "*The Processing of Multimedia Data Using Image Processing Techniques*", International Conference, Information and Media Technology-IMT 2013, 20 Dec, Ulaanbaatar, Mongolia, № 23
36. G.Ganchimeg, "*Museum websites and museum visitors in Mongolia*", The 4th International Conference on Creative Science and Technology, ICCST2013, pp. 232-234, 04/10/2013

37. G.Ganchimeg, “*Representing Narrative in Multimedia Information Systems*”, The 8th International Forum on Strategic Technology 2013, Proceedings volume II, pp. 196-200, 28/06/2013
38. G.Ganchimeg, “*Application exhibits of historical virtual museum*“, International Conference on Electronics Information and Communication ICEIC-2013, pp. 188-189, Indonesia, 28/01/2013
39. G.Ganchimeg, “*Multimedia information processing*”, E-Governance and Information Technology, E-IT 2013, pp. 159-161, Mongolia, 04/26/2013
40. G.Ganchimeg, “*Cooperative E-learning Multimedia Systems*”, Scientific transactions advanced engineering Mathematics and Mechanics , 2012, pp. 23-26, №09/132, 20/11/2012
41. G.Ganchimeg, “*Laser projector, laser projection technology*”, Conference of Technology Young Scientists Association of Mongolia, in Khureltogoot -2012, pp. 95-100, 10/10/2012
42. G.Ganchimeg, “*Application of virtual exhibits*”, Conference of Technology Young Scientists Association of Mongolia, in Khureltogoot -2011, pp. 258-261, 15/10/2011
43. G.Ganchimeg, “*Using exhibits of historical virtual museum in e_learning*”, International Conference EICTHE-2011, pp. 134-136, 08/07/2011
44. G.Ganchimeg, T.Munkhtsogt, P.Munkhbaatar, “*Cloud computing*”, International Conference on Knowledge Based Industry 2011, pp. 189-190, 06/07/2011
45. G.Ganchimeg, “*Virtual reality system*”, Conference of Technology Young Scientists Association of Mongolia, in Khureltogoot -2010, pp. 270-272
46. G.Ganchimeg, “*Coordination in Cooperative E-learning Multimedia Systems*”, Conference of Technology Young Scientists Association of Mongolia, in Khureltogoot -2009, pp. 40-44
47. G.Ganchimeg, “*Multimedia system*”, Conference of Technology Young Scientists Association of Mongolia, in Khurel togoot-2008, pp. 243-245
48. G.Ganchimeg, “*Erdem*”-e-Library software, Central Library MUST of Mongolia, 2007
49. B.Sukhbaatar., L.Batkhisig., G.Ganchimeg., “*Information Technologies in Education in the 21st Century*”, International Conference, Yerevan, Armenia, May 21-23, 2007, Using E_Library for the distance learning, pp. 58-68
50. G.Ganchimeg, “*Communication network, Information theory*”, Conference of Technology Young Scientists Association of Mongolia, in Khurel togoot-2006, pp. 66-69.
51. B.Sukhbaatar, G.Ganchimeg, “*Some Studies on the M_Learning Application of Mobile Communication Devices in Mongolia*”, Abstracts. “The 8th International Conference on Electronics, Information, and Communication-ICEIC 2006”, pp. 259-263
52. G.Ganchimeg, B.Sukhbaatar, “*Introduction of M_learning based on Mobile communication system*”, Mongolian State Pedagogical University of Mathematics conference, 2006, pp. 27-30.
53. G.Ganchimeg, “*Mathematical research of the schedules for lessons*”, Conference of Technology Young Scientists Association of Mongolia, in Khurel togoot-2005, pp. 166-171.

DEVELOPED SOFTWARE AND WEBSITES

1. Enhance business operations through the utilization of artificial intelligence, software, №14688/2023, copyright certificate
2. The text data parameters processing algorithm and software, № 2013/5591, copyright certificate
3. Organize textual data database optimization algorithm, № 2013/5590, copyright certificate
4. Academic scheduling and testing software, № 2011/223
5. Academic 14 multimedia CD for The Mongolian State History Museum, №2007/038, copyright certificate
6. Academic “Erдем”, E_library software, №2567/2006, copyright certificate

ORGANIZATIONAL AFFILIATIONS

Member of Mongolian Association for Young Researchers on Technology and Innovation, since 2004

QUALIFICATIONS & SKILLS

Proficient in Microsoft Office 2018, Adobe CS 6.0, C++, Python etc.

INTERESTS & HOBBIES

hiking, reading

AWARDS

Outstanding article award, International Journal of Knowledge Content Development & Technology, 2015, 2017

The Best Young Lecturer of the Mongolian University of Science and Technology for the Year of 2007, 2010 and senior lecturer 2014

“Credentials”, Ministry of Education and Science, Mongolia, 2013

"Chief Education Officer", Ministry of Education and Science, Mongolia, 2019

“MUST of Director's award 2023”, Mongolia

SHORT-TERM TRAINING EXPERIENCE

| Period (YY-MM to YY-MM) | College / University | Location (country) | Major | Degree |
|-------------------------|---------------------------------------|--------------------|------------------------|---------------------|
| 22-06 to 22-07 | KOICA & Sangmyung University | Republic of Korea | ICT training | certificate |
| 16-10 to 17-03 | Austrian Institute of Technology /AIT | Austria | Postdoc | Confirmation letter |
| 16-01 to 16-02 | Indian Institute of Remote Sensing | India | Image processing | certificate |
| 12-02 to 12-08 | GIST Research program | Republic of Korea | Doctor student | |
| 10-01 to 10-02 | Training course 2 for ITEE | Mongolia | ICT training | certificate |
| 09-09 to 09-12 | GIST Intern Program | Republic of Korea | Information technology | certificate |