Curriculum Vitae

updated @15 October 2025

PERSONAL

MK Speaker

Name	Jehyun Lee (이제현, 李濟鉉)
Born	24. Feb. 1979, Seoul, Republic of Korea
e-mail	jehyun.lee@gmail.com
github	https://github.com/jehyunlee/
blog (Tech)	https://jehyunlee.github.io/
blog (Book)	https://jehyunlee.tistory.com/

SUMMARY

MOST VALUABLE PROFESSIONAL — Microsoft — ALUMNI

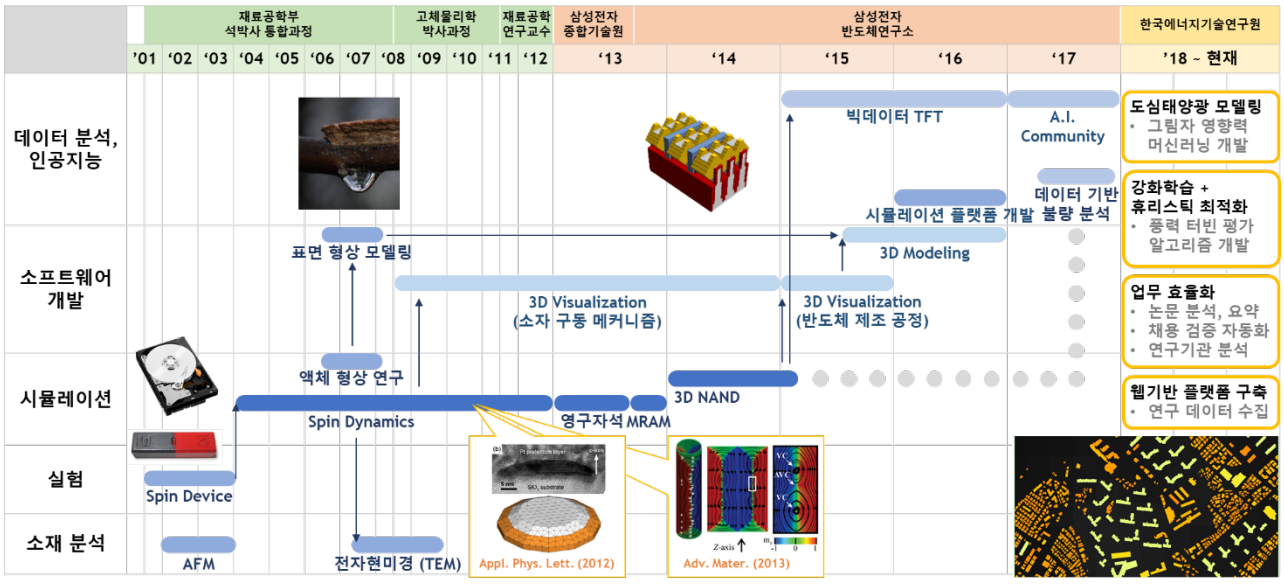
Education – 2 Ph.D degrees

(1) Materials Sci. & Eng. (Seoul Nat'l Univ., 2008.08.).
(2) Solid State Physics (Vienna Univ. of Tech. 2011.06.)

Achievements

(1) **Author** of 48 SCI papers, 49 International Conferences and 2 Books (2004~)
(2) 5 Exhibitions as an **AI artist** (2024~)
(3) **Inventor** of 15 Patents and 8 Software Copyrights (2013~)
(4) 37 **Awards winner** given for SCI Journal publications, Conference, Companies and Societies (2010~)
(5) 28 **Community contributions** for Academic Societies and IT Communities (2004~)

1994.03	1997.03	2001.03	2008.09	2011.09	2013.01	2013.10	2017.03	2018.01~
High School	Bachelor	Integrated Master & Ph.D	Ph.D	Research Prof.	Senior Researcher	Senior Engineer	Principal Engineer	Senior Researcher Principal Researcher
		Materials and Devices researcher				Data Scientist		
• Chemistry	• Materials Sci. & Eng.	• Spin device fabrication • Magnetic materials simulation • Image Processing	• Electron microscopy	• Nanoparticle simulation	• Magenetic materials	• MRAM • 3D NAND • Platform TF • Big data TF	• Data-driven engineering • AI TF	• Renewable energy • Research platform • Energy material • Digital Transform.



APPOINTMENTS

AI Core Project TF, Sejong, Korea — 2025.09. – Present
AI 핵심 프로젝트 TF
Civil Specialist

Committee on AI Science & Technology, Seoul, Korea — 2025.08. – Present
한국과학기술한림원 AI 과학기술위원회
Member

Committee on NST Research Management Innovation TF, Sejong, Korea — 2025.06. – Present
국가과학기술연구회 연구행정혁신추진단
AI Branch AI 분과장
Chief

University of Science and Technology 과학기술연합대학원대학교, Daejeon, Korea — 2023.07. – Present
Artificial Intelligence @KIER School
Full-time Professor — 2024.03. – Present
Adjunct Professor — 2023.07. – 2024.02.

Korea Institute of Energy Research 한국에너지기술연구원, Daejeon, Korea — 2018.01. – Present
Data Science: Renewable energy, Intelligent Automation, and Research Data System Construction
Leader, Principal Researcher (Energy AI & Computational Science Laboratory) — 2023.07. – Present
Principal Researcher (Computational Science & Engineering Laboratory) — 2023.03. – 2023.07.
Senior Researcher (Platform Technology Laboratory) — 2017.01. – 2023.02.

Presidential Committee on AI 국가인공지능위원회, Seoul, Korea — 2024.12. – 2025.07.
Industry·Public Branch 산업·공공분과
Member — 2024.12. – Present

Samsung Electronics 삼성전자, Suwon/Hwaseong, Korea — 2013.01. – 2017.12.
3D Visualization and Modeling of Semiconductor Devices: DRAM/3D NAND/Logic
Process TCAD: Deposition/Etch/Epi. Growth/Sigma Etch
Development of Memory Devices: MRAM, 3D NAND
Principal Engineer (Semiconductor R&D Center) — 2017.03. – 2017.12.
Senior Engineer (Semiconductor R&D Center) — 2013.10. – 2017.02.
Permanent magnet development project.
Research Staff Member (Samsung Advanced Institute of Technology) — 2013.01. – 2013.09.

Seoul National University 서울대학교, Seoul, Korea — 2011.09. – 2012.12.
Under supervision of Prof. Sang-Koog Kim
National Creative Research Initiative Center for Spin Dynamics and Spin-Wave Devices.
Research Assistant Professor

Vienna University of Technology, Vienna, Austria — 2008.09. – 2011.06.
TEM assisted FEM Micromagnetics, under supervision of Prof. Josef Fidler
Ph.D. student with Post Doc. Benefits

Korea Institute of Science and Technology 한국과학기술연구원, Seoul, Korea
Spintronic devices
Under supervision of Dr. Kwang-Youn Kim
Research Assistant — 2002.03. – 2005.02.
Diamond Like Carbon
Under supervision of Dr. Kwang-Ryeol Lee
Research Assistant — 1999.07. – 1999.08.

EDUCATION

Ph.D. @Vienna University of Technology, Vienna, Austria 2008.09. – 2011.06.
Under supervision of Prof. Josef Fidler (Advanced Magnetism Group)
Research Theme: Study on magnetic recording media using TEM and micromagnetics
Thesis title: "Inhomogeneous magnetization processes in advanced recording media"
Ph.D in Institute of Solid State Physics

Ph.D. @Seoul National University 서울대학교, Seoul, Republic of Korea 2001.09. – 2008.08.
Under supervision of Prof. Kyu Hwan Oh (Lab. of Materials Deformation and Processing)
Research Theme: Micromagnetic Simulations of magnetic recording media
Thesis title: "A study on the effect of the convex grain surface on the magnetic behavior from the viewpoint of magnetic recording"
Integrated Master and Ph.D. in School of Materials Science & Engineering

Bachelor @Seoul National University 서울대학교, Seoul, Republic of Korea 1997.03. – 2001.08.
Thesis title: "Mechanical Behaviors of DLC/W multilayer"
Bachelor in School of Materials Science & Engineering

Incheon Science High School 인천과학고등학교, Incheon, Republic of Korea 1994.03. – 1997.02.

RESEARCH VISITS

Vienna University of Technology, Vienna, Austria 2005.02. – 2006.02., 2007.02.
Under supervision of Prof. Josef Fidler, Prof. Thomas Schrefl and Dr. Dieter Suess
Financially supported by the BK21 project of the Ministry of Education and Human Resource Foundation, Republic of Korea.
Guest Researcher

Vienna University of Technology, Vienna, Austria 2007.12. – 2008.08.
Under supervision of Prof. Josef Fidler, Prof. Thomas Schrefl and Dr. Dieter Suess
Financially supported by the project of the FWF (Austrian Science Fund), Austria and the KOSEF (Korean Science Foundation), Republic of Korea.
Guest Researcher

TASK FORCE TEAM ACTIVITIES

AI for S&T 2025.09. – Present
Under preparation
Ministry of Science and ICT

AI Community 2017.01. – 2017.12.
Supervisor: Seok-Woo Nam (Executive Vice President)
Facilitator: Wonseok Yang, Principle Engineer
Semiconductor R&D Center, Samsung Electronics

Big Data TF 2015.03. – 2016.12.
Supervisor: Seok-Woo Nam (Executive Vice President)
Facilitator: Wonseok Yang, Principle Engineer
Semiconductor R&D Center, Samsung Electronics

Innovation (Solgae) TF 2015.03. – 2015.09.
CAE Team (Team Leader: Young-Gwan Park, Vice President)
Semiconductor R&D Center, Samsung Electronics

EXHIBITIONS (5)

2024

1. 서울대학교 미술대학 동창회 주최, “2024 소확행 아트컬렉션”,
2024.10.10.–2024.10.16. SNU 장학빌딩 2F 베리타스홀
출품작: “셀카”, “기다림”, 안도감”, “공주님”, “읽는 소녀”



셀카 DALL.E3

기다림 DALL.E3

안도감 DALL.E3

공주님 DALL.E3

읽는 소녀 DALL.E3

2. 에이아이프렌즈학회, “2024 AAiCON 생성 AI 아티스트 초대전”,
2024.06.27.–2024.06.28. 대전컨벤션센터
출품작: “셀카”, “기다림”, 안도감”, “공주님”, “희망”



셀카 DALL.E3

기다림 DALL.E3

안도감 DALL.E3

공주님 DALL.E3

희망 DALL.E3

3. 서울대학교 미술대학 동창회 주최, “2024 소확행 아트컬렉션”,
2024.05.02.–2024.05.08. 한전아트센터갤러리
출품작: “불꽃 4”, “불꽃 5”, “불꽃 6”



불꽃4 DALL.E3

불꽃5 DALL.E3

불꽃6 DALL.E3

4. 서울대학교 미술대학 동창회 주최, “S-Art Festa”,
2024.04.02.–2024.04.08. 한전아트센터갤러리
출품작: “은행잎나무”



은행잎나무 DALL.E3

5. AI Creator & Prompt Factory 공동주최, “먀스터피스展”,
2024.01.19. 로컬모티브 라운지
출품작: “Destructive Innovation”, “까치”



self-destructive innovation DALL.E3

까치 DALL.E3

BOOKS (2)

2024

1. 정용진, 권오준, 이동훈, **이제현**, 강지명 (equally contributed)
"스마트 에너지 인공지능 SW 분석가", 한국생산성본부 (2024.01.15.) ISBN 9788937102080

2023

2. 권정민, 권시현, 김영민, 김진환, 박준석, 변성윤, 이정원, 이진형, **이제현** (equally contributed)
"데이터 과학자 원칙", 골든래빗 (2023.06.10.) ISBN 9791191905335

PUBLICATIONS ON SCI JOURNALS (48) ■FIRST (17) ■CORRESPONDING (1)

2025

1. Haneul Choi, **Jehyun Lee,** Jonghun Kim, "Performance evaluation of GPT-4o on South Korean national exams for building mechanical equipment maintenance", Scientific Reports 15 30436 (2025)
https://doi.org/10.1038/s41598-025-16118-x

2024

2. Joonhee Kang, Byung-Hyun Kim, Min Ho Seo, **Jehyun Lee,** "Sampling rare events using nanostructures for universal Pt neural network potential", Current Applied Physics 66 110 (2024)
https://doi.org/10.1016/j.cap.2024.07.005

2023

3. Jihoo Jung, **Jehyun Lee,** (equally contributed first authors)
Sangjin Choi and Woonho Baek, "Information Analysis on Foreign Institution for International R&D Collaboration Using Natural Language Processing", Energies 16(1) 33 (2023)
https://doi.org/10.3390/en16010033

2022

4. Myeongchan Oh, **Jehyun Lee,** Jin-Young Kim, Hyun-Goo Kim, "Machine learning-based statistical downscaling of wind resource maps using multi-resolution topographical data", Wind Energy 25(6) 1121 (2022)
https://doi.org/10.1002/we.2718

2021

5. Sung Jun Hong, Hoje Chun, **Jehyun Lee,** Byung-Hyun Kim, Min Ho Seo, Joonhee Kang and Byungchan Han, "First-Principles-Based Machine-Learning Molecular Dynamics for Crystalline Polymers with van der Waals interactions", Journal of Physical Chemistry Letters 12 6000 (2021)
https://doi.org/10.1021/acs.jpclett.1c01140
6. Hyeon-Kyu Park, Jae-Hyeok Lee, Jehyun Lee, Sang-Koog Kim, "Optimizing machine learning models for granular NdFeB magnets by very fast simulated annealing", Scientific Reports 11 3792 (2021)
https://doi.org/10.1038/s41598-021-83315-9

2016

7. Sang-Koog Kim, Myoung-Woo Yoo, **Jehyun Lee,** Jae-Hyeok Lee, and Min-Kwan Kim, "Resonant vortex-core reversal in magnetic nano-spheres as robust mechanism of efficient energy absorption and emission", Scientific Reports 6 31513 (2016)
https://doi.org/10.1038/srep31513

2015

8. Bosung Kim, Myoung-Woo Yoo, **Jehyun Lee,** and Sang-Koog Kim, "Temperature effect on vortex-core reversals in magnetic nanodots", J. Appl. Phys. 117 173910 (2015)
https://doi.org/10.1063/1.4919836
9. Sang-Koog Kim, Myoung-Woo Yoo, **Jehyun Lee,** Ha-Youn Lee, Jae-Hyeok Lee, Yuri Gaididei, Volodymyr P. Kravchuk & Denis D. Sheka, "Resonantly excited precession motion of three-dimensional vortex core in magnetic nanospheres", Scientific Reports 5 11370 (2015)
https://doi.org/10.1038/srep11370

2014

10. Min-Kwan Kim, Prasanta Dhak, Ha-Youn Lee, Jae-Hyeok Lee, Myoung-Woo Yoo, **Jehyun Lee,** Kyoungsuk Jin, Arim Chu, Ki Tae Nam, Hyun Soon Park, Shinji Aizawa, Toshiaki Tanigaki,Daisuke Shindo, Miyoung Kim and Sang-Koog Kim, "Self-assembled magnetic nanospheres with three-dimensional magnetic vortex", Appl. Phys. Lett. 105 232402 (2014)

https://doi.org/10.1063/1.4903741

11. Robert Streubel, **Jehyun Lee,** Denys Makarov, Mi-Young Im, Daniil Karnaushenko, Luyang Han, Rudolf Schafer, Peter Fischer, Sang-Koog Kim, Oliver G. Schmidt, "Magnetic Microstructure of Rolled-Up Single-Layer Ferromagnetic Nanomembranes", Adv. Mater. 26 316 (2014)
https://doi.org/10.1002/adma.201303003
12. Jehyun Lee, Denys Makarov, Christoph Brombacher, Barbara Dymerska, Dieter Suess, Manfred Albrecht, Josef Fidler, "Scaling dependence and tailoring of the pinning field in FePt-based exchange coupled composite media", Nanotechnology 25 045604 (2014)
https://doi.org/10.1088/0957-4484/25/4/045604

2013

13. Robert Streubel, Denys Makarov, **Jehyun Lee,** Christian Müller, Michael Melzer, Rudolf Schäfer, Carlos Cesar Bof Bufon, Sang-Koog Kim, Oliver G. Schmidt, "Rolled-up Permalloy Nanomembranes with Multiple Windings", SPIN 3 1340001 (2013)
https://doi.org/10.1142/S2010324713400018
14. V Neu, C Schulze, M Faustini, **J Lee,** D Makarov, D Suess, S-K Kim, D Grosso, L Schultz and M Albrecht, "Probing the energy barriers and magnetization reversal processes of nanoperforated membrane based percolated media", Nanotechnology 24 145702 (2013)
https://doi.org/10.1088/0957-4484/24/14/145702
15. Young-Sang Yu, Dong-Soo Han, Myoung-Woo Yoo, Ki-Suk Lee, Youn-Seok Choi, Hyunsung Jung, **Jehyun Lee,** Mi-Young Im, Peter Fischer & Sang-Koog Kim, "Resonant amplification of vortex-core oscillations by coherent magnetic-field pulses", Scientific Reports 3 1301 (2013)
https://doi.org/10.1038/srep01301
16. Jehyun Lee, Barbara Dymerska, Josef Fidler, Vasilis Alexandrakis, Thanassis Speliotis, Dimitris Niarchos, Peter Pongratz, Dieter Suess, "Fabrication and high-resolution electron microscopy study of FePt L10/A1 graded exchange spring media", Phys. Status Solidi (A) 210 1305 (2013)
https://doi.org/10.1002/pssa.201228731
17. YM Kang, **J Lee,** YJ Kang, JB Park, SI Kim, SM Lee, K Ahn, "Understanding on coercivity behavior of M-type strontium hexaferrite through thin-film experiment and micromagnetic modeling", Appl. Phys. Lett. 103 122407 (2013)
https://doi.org/10.1063/1.4821821

2012

18. G. Fiedler, J. Filder, **J. Lee,** T. Schrefl, R. L. Stamps, H. B. Braun and D. Suess, "Direct calculation of the attempt frequency of magnetic structures using the finite element method", J. Appl. Phys. 111 093917 (2012)
https://doi.org/10.1063/1.4712033
19. Myoung-Woo Yoo, **Jehyun Lee** and Sang-Koog Kim, "Radial-spin-wave-mode-assisted vortex-core magnetization", Appl. Phys. Lett. 100 172413 (2012)
https://doi.org/10.1063/1.4705690
20. B Dymerska, **J Lee,** J Fidler, D Suess, "Micromagnetic study of exchange spring media with a rough interface on an example of FePt films", J. Phys D: Appl. Phys. 45 495001 (2012)
https://doi.org/10.1088/0022-3727/45/49/495001

2011

21. C. Brombacher, M. Grobis, **J. Lee,** J. Fidler, T. Eriksson, T. Werner, O. Hellwig, and M. Albrecht, "$L1_0$ FePtCu bit patterned media", Nanotechnology 23 025301 (2011)
https://doi.org/10.1088/0957-4484/23/2/025301
22. D. Suess, L. Breth, **J. Lee,** M. Fuger, C. Vogler, F. Bruckner, B. Bergmair, T. Huber and J. Fidler, "Calculation of coercivity of magnetic nanostructures at finite temperatures", Appl. Phys. Lett. 99 062505 (2011)
http://dx.doi.org/10.1103/PhysRevB.84.224421
23. Jehyun Lee, Christoph Brombacher, Josef Fidler, Barbara Dymerska, Dieter Suess, and Manfred Albrecht, "Contribution of the easy axis orientation, anisotropy distribution and dot size on the switching field distribution of bit patterned media", Appl. Phys. Lett. 99 062505 (2011)
https://doi.org/10.1063/1.3623752
24. Jehyun Lee, Vasilis Alexandrakis, Markus Fuger, Barbara Dymerska, Dieter Suess, Dimitris Niarchos and Josef Fidler, "FePt $L1_0$/A1 graded media with a rough interphase boundary", Appl. Phys. Lett. 98 222501 (2011)
https://doi.org/10.1063/1.3595307
25. V. Alexandrakis, Th. Speliotis, E. Manios, D. Niarchos, J. Fidler, and **Jehyun Lee,** G. Varvaro, "Hard/graded exchange spring composite media based on FePt", J. Appl. Phys. 109 07B729 (2011)
https://doi.org/10.1063/1.3556773

2010

26. C. Schulze, M. Faustini, **J. Lee,** H. Schletter, P. Krone, M. Gass, K. Sader, A. L. Bleloch, M. Fuger, D. Suess, J. Fidler, M. U. Lutz, U. Wolff, V. Neu, M. Hietschold, D.Makarov and M. Albrecht, "Magnetic Films On Nanoperfoated Templates: A Route Towards Percolated Perpendicular Media", Nanotechnology 21 495701 (2010)
https://doi.org/10.1088/0957-4484/21/49/495701
27. J. Schratzberger, **J. Lee,** M. Fuger, J. Fidler, G. Fiedler, T. Schrefl, and D. Suess, "Validation of the transition state theory with Langevin-dynamics simulations", J. Appl. Phys. 108 033915 (2010)
https://doi.org/10.1063/1.3460639
28. Jehyun Lee, Markus Fuger, Josef Fidler, Dieter Suess, Thomas Schrefl and Osamu Shimizu, "Modeling of the write and read back performances of hexagonal Ba-ferrite particulate media for high density tape recording", J. Magn. Magn. Mater. 322 3869 (2010)
https://doi.org/10.1016/j.jmmm.2010.08.010
29. D. Punz, **J. Lee,** M. Fuger, J. Fidler, T. Schrefl and D. Suess, "Theory and Micromagnetics of Pinning Mechanism at Cylinderical Defects in Perpendicular Magnetic Films", J. Appl. Phys. 107 113926 (2010)
https://doi.org/10.1063/1.3372611
30. Jehyun Lee, Thomas Uhrmann, Theodoros Dimopoulos, Hubert Brückl, and Josef Fidler,
"TEM Study on Diffusion Process of NiFe Schottky and MgO/NiFe Tunneling Diodes for Spin Injection in Silicon", IEEE Trans. Magn. 46 2067 (2010)
https://doi.org/10.1109/TMAG.2010.2040594
31. Denys Makarov, **Jehyun Lee,** (equally contributed first authors)
Christoph Brombacher, Christian Schbert, Markus Fuger, Josef Fidler and Manfred Albrecht, "Perpendicular FePt-based exchange-coupled composite media", Appl. Phys. Lett., 96 062501 (2010)
https://doi.org/10.1063/1.3309417
32. V. Alexandrakis, D. Niarchos, K. Mergia, **Jehyun Lee,** J. Fidler, I. Panagiotopoulos, "Magnetic Properties of Graded Al/L10 films obtained by heat-treatment of FePt/CoPt multilayers", J. Appl. Phys., 107 013903 (2010)
https://doi.org/10.1063/1.3275925

2009

33. Jehyun Lee, Dieter Suess, Thomas Schrefl, Julian Dean, Josef Fidler, "Increases in effective head field gradients in exchange spring media", Appl. Phys. Lett., 95 172509 (2009)
https://doi.org/10.1063/1.3257364
34. G. Winkler, D. Suess, **J. Lee,** J. Fidler, M. A. Bashir, J. Dean, A. Goncharov, G. Hrkac, S. Bance, and T. Schrefl, "Microwave-assisted three-dimensional multilayer magnetic recording", Appl. Phys. Lett., 94 232501 (2009)
https://doi.org/10.1063/1.3152293
35. D. Suess, **J. Lee,** J. Fidler, H. S. Jung, E. M. T. Velu, W. Jiang, S. S. Malhotra, G. Bertero, and T. Schrefl, "Effect of Intergranular Exchange on Thermal Stability and Coercive Field of Perpendicular, Single Phase, Exchange Spring, and Coupled Granular Continuous", IEEE Trans. Magn., 45 88 (2009)
https://doi.org/10.1109/TMAG.2008.2002859
36. Ji Woo Kim, Oliver Friedrichs, Jae-Pyoung Ahn, Do-Hyun Kim, Seul-Cham Kim, Arndt Remhof, Hee-Suk Chung, **Jehyun Lee,** Jae-Hyeok Shim, Young Whan, "Transmission electron microscopy study on the microstructural change of 2LiBH4/Al with hydrogen sorption cycling", Scripta Materialia, 60 1089 (2009)
https://doi.org/10.1016/j.scriptamat.2009.01.031
37. Jehyun Lee, Dieter Suess, Thomas Schrefl, Eu Sun Yu, You Sub Lee, Kyu Hwan Oh and Josef Fidler, "Contribution of Convex Surfaces to Magnetostatic Interaction in Granular Medium", IEEE Trans. Magn., 45 2655 (2009)
https://doi.org/10.1109/TMAG.2009.2018949
38. Jehyun Lee, Dieter Suess, Thomas Schrefl, Kyu Hwan Oh and Josef Fidler, "Grain geometry induced reversal behavior alteration", J. Phys. D: Appl. Phys., 42 045005 (2009)
https://doi.org/10.1088/0022-3727/42/4/045005
39. D. Suess, **J. Lee,** J. Fidler, T. Schrefl, "Exchange-coupled perpendicular media", J. Magn. Magn. Mater., 321 545 (2009)
https://doi.org/10.1016/j.jmmm.2008.06.041

2008

40. Jehyun Lee, Dieter Suess, Thomas Schrefl, Kyu Hwan Oh and Josef Fidler, "Contribution of the shrunk interface and the convex surface of grains on magnetic behavior in granular film", J. Appl. Phys., 07F519 (2007).
https://doi.org/10.1063/1.2833302

2007

41. J. Lee, D. Suess, T. Schrefl, K. Oh, J. Fidler, "Magnetic Characteristics of Ferromagnetic Nanotube", J. Magn. Magn. Mater., 310 2445 (2007)
https://doi.org/10.1016/j.jmmm.2006.10.1137
42. J. Lee, D. Suess, T. Schrefl, K. Oh, J. Fidler, "Micromagnetic study of recording on ion-irradiated granular-patterned media", J. Magn. Magn. Mater., 319 5 (2007)
https://doi.org/10.1016/j.jmmm.2007.04.019
43. D. Suess, S. Eder, **J. Lee,** R. Dittrich, J. Fidler, J. W. Harrell, T. Schrefl, G. Hrkac, M. Schabes, N. Supper, A. Berger, "Reliability of Sharrocks equation for exchange spring bilayers", Phys. Rev. B., 75 174430 (2007)
https://doi.org/10.1103/PhysRevB.75.174430

2006

44. J. Lee, D. Suess, T. Schrefl, K. Oh, J. Fidler, "Contribution of Local Incoherency on Gilbert-Damping", IEEE Trans. Magn., 42 3210 (2006)
https://doi.org/10.1109/TMAG.2006.880565

2005

45. Jang, S.H., Kim, Y.W., **Lee, J.H.,** Kim, K.Y., "Si -based magnetic tunnel transistor with single CoFe base layer ", J. Appl. Phys., 98 094502 (2005)
https://doi.org/10.1063/1.2126124

2004

46. J. Lee, K. Oh, H. Kim, K. Kim, "Magnetization reversal process of the nanosized elliptical permalloy magnetic dots with various aspect ratios", J. Magn. Magn. Mater., 272-276 736 (2004)
https://doi.org/10.1016/J.JMMM.2003.12.624
47. S. Jang, T. Kang, **J. Lee,** K. Kim, "Si-based magnetic tunnel transistor with high transfer ratio", J. Magn. Magn. Mater., 272-276 1930 (2004)
https://doi.org/10.1016/J.JMMM.2003.12.707
48. D. Kim, J. Kim, B. Park, J. Lee, J. Kim, **J. Lee,** J. Chang, H. Kim, I. Kim, Y. Park, "SrFeO3 nanoparticles-dispersed SrMoO4 insulating thin films deposited from Sr2FeMoO6 target in oxygen atmosphere", Appl. Phys. Lett., 84 5037 (2004)
https://doi.org/10.1063/1.1763638

KEYNOTES (1) & INVITED TALKS (19)

2025

1. **Jehyun Lee,** "Application of AI on energy in KIER", 1. July 2025, International Conference on AI and Climate Change, Fairmont Ambassador Seoul, Seoul, Korea.
2. **Jehyun Lee,** "Wise Research Life Using Artificial Intelligence", 13. February 2025, R&D Light+ Seminar, KEPCO KEPRI, Daejeon, Korea.

2024

3. **Jehyun Lee,** "Drawing, a Serious Hobby", 6. December 2024, Seminar on AI and Artistic Creation: Focusing on Visual Arts and Films, Seoul, Korea.
4. **Jehyun Lee,** "Building R&D Ecosystem Strategies for Efficient Utilization of Generative AI", 28. November 2024, The 4th Wonjung Forum, Seoul, Korea.
5. **Jehyun Lee,** "Current Applications and Integration of Generative AI in Research Environments", 15. October 2024, ETRI Open Source Techday, Seoul, Korea.
6. **Jehyun Lee,** "Practical Applications of AI on My Workspace", 15. October 2024, Taejae Future Education Forum Workshop, Seoul, Korea.
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18. Jehyun Lee, "Introduction of finite element micromagnetics on 3-dimensional arbitrary geometries," 10. June, Institute for Integrative Nanosciences, IFW Dresden, Dresden, Germany.
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2. **Jehyun Lee,**
"International Collaboration and Trend Analysis" Colorado School of Mines, June 15 – 20. 2025, The 3rd RD20 Summer School, Golden, Colorado, United States.

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"The Rise of China in Hydrogen Alkaline Research" Ramada Plaza Jeju, November 5 – 9. 2024, AFORE 2024, Jeju, Republic of Korea.
4. Jihoo Jung, **Jehyun Lee,** Sangjin Choi, Woonho Baek, Jaekyung Yoo
"AI-based Identification of Global Leading Institutions in Alkaline Electrolysis Research and International Collaboration Strategy" Ramada Plaza Jeju, November 5 – 9. 2024, AFORE 2024, Jeju, Republic of Korea.

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6. Jihoo Jung, **Jehyun Lee,** Sangjin Choi, Woonho Baek
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4. **이제현,** "출력 언어 및 데이터 시각화 서식 설정을 포함한 환경 설정을 하는 방법 및 장치". 제 C-2024-039985 호
   "Method and Apparatus for Configuring Environment Settings Including Output Language and Data Visualization Format"
5. **이제현,** 고준렬, 송영호, 김효정, 신지현, "논문 실적의 진위 여부를 검증하고 정량 평가하는 장치 및 방법". 제 C-2024-038794 호
   "Method and Apparatus for Verifying the Authenticity and Quantitatively Evaluating Research Paper Achievements"
6. **이제현,** 이웅희, 유란, 김승규, 이정인, 박민희, "언론보도를 주제별로 분류하는 장치 및 방법". 제 C-2024-039983 호
   "Method and Apparatus for Classifying Industry Trend News from Media Reports"

2022

7. **이제현,** 김현구, 김창기, 유시현, "임의의 연구 주제에 대한 동향 분석 프로그램". 제 C-2022-014624 호
   "Trend analysis program for arbitrary research topic"

2018

8. **이제현,** 임강훈, 이찬우, 김병현, "원자구조의 분자흡착구조 선별 모델링 자동화 프로그램". 제 C-2018-039985 호
   "Automated surface adsorption modeling program for arbitrary atomic structures"

LECTURES (4)

2023

1. **Lecturer**
   Solar-Geothermal Fusion System Engineering (Dr. Sung Eun Park), University of Science & Technology.
   Spring Semester
2. **Lecturer**
   AI and Green Energy (Dr. Chi-Hwan Han), University of Science & Technology.
   Spring Semester

2007

3. **Teaching Assistant**
   Numerical Image Analysis (Prof. Kyu Hwan Oh), Seoul National University.
   Fall Semester

2004

4. **Teaching Assistant**
   Electric Circuits (Prof. Kyu Hwan Oh), Seoul National University.
   Fall Semester

AWARDS AND REMARKS (37)

1. NST Science Communicator (2024):
   국가과학기술연구회 과학커뮤니케이터 (국가과학기술연구회 이사장 훈격)
   이제현
   Awarded by **Chairperson of National Research Council of Science & Technology (Dr. Bok Chul Kim)**
2. KIER Conference Work Innovation 1st Prize (2023):
   대상 (한국에너지기술원장 훈격)
   이제현, 박민희, 조준묵, 최상진, 정지후, "에너지 R&D 혁신을 위한 계산과학 기반 연구 및 기후변화 대응 정책지원 기반구축"
   Awarded by **President of Korea Institute of Energy Research (Dr. Chang-Keun Yi)**
3. Collaboration Team Award (2023):
   우수 협업부서상 (한국에너지기술연구원장 훈격)
   이제현, 이찬우, 주영환, 박정호, 박상신, 임강훈, 윤용, 정우석, 이승희, 김상우
   Awarded by **President of Korea Institute of Energy Research (Dr. Chang-Keun Yi)**
4. Collaboration Award (2023):
   협업상 (한국에너지기술연구원장 훈격)
   이제현 (에너지+AI 학습조직)
   Awarded by President of Korea Institute of Energy Research (Dr. Chang-Keun Yi)
5. Safety·Health Activity Team Award (2023):
   안전·보건활동 종합평가 우수부서상 (한국에너지기술연구원장 훈격)
   에너지 AI·계산과학실
   Awarded by **President of Korea Institute of Energy Research (Dr. Chang-Keun Yi)**
6. NST Digital Transformation Idea Competition 1st Prize (2023):
   국가과학기술연구회 디지털 전환 아이디어 공모전 대상 (국가과학기술연구회 이사장 훈격)
   이제현, 김희웅, 고은정, "연구 책임자 연구 역량 증빙 자동화"
   Awarded by **Chairperson of National Research Council of Science & Technology (Dr. Bok Chul Kim)**
7. Collaboration Award (2022):
   협업상 (한국에너지기술연구원장 훈격)
   이제현 (KIER Tube 활성화)
   Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
8. NST RPA Task Idea Competition 1st Prize (2022):
   국가과학기술연구회 RPA 업무 아이디어 공모전 대상 (국가과학기술연구회 이사장 훈격)
   이제현, 송영호, 김순환, 김태호, 정경훈, 고은정, "채용 검증 자동화"
   Awarded by **Chairperson of National Research Council of Science & Technology (Dr. Bok Chul Kim)**
9. KIER Conference Work Innovation 3rd Prize (2022):
   우수상 (한국에너지기술원장 훈격)
   이제현, 이고운, 권지희, 김예진, 유정준, 박지찬, "연구 데이터 시스템 구축"
   Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
10. KIER Conference Work Innovation 3rd Prize (2022):
    우수상 (한국에너지기술원장 훈격)
    이제현, 송영호, 최인용, 이민규, 구기관, 유재경, 송영배, 정지후, 박민희,
    "문헌 정보 분석 기술 기반 업무 자동화 및 심층 분석"
    Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
11. KIER Conference Poster 3rd Prize (2022):
    우수상 (한국에너지기술원장 훈격)
    윤창열, 오명찬, 김보영, **이제현,** 김현구,
    "100m x 100m 격자형 국내 태양광 시장잠재량 분석모델 및 데이터 플랫폼 개발"
    Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
12. KIER Conference Oral 3rd Prize (2022):
    우수상 (한국에너지기술원장 훈격)
    김현구, 김창기, 오명찬, 김보영, 김진영, 윤창열, **이제현,** 강용혁, 김건훈, 래티샤, 엘비나, 이동규,
    "위성영상 기반 재생에너지 발전진단 및 변동성 예측"
    Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
13. Tech. Award (2022):
    기술논문상 (한국태양에너지학회장 훈격)
    Awarded by **President of Korean Solar Energy Society (Dr. Hyun-Goo Kim)**

14. **Best Fusion Cluster 1st Prize (2022):**
    우수 융합 클러스터 최우수상 (국가과학기술연구회장 훈격)
    박지찬, 강신욱, 김병현, 양정일, **이제현,** 박수정, 오경희, 이학근, 장산하,
    "미래 촉매 정보학 구축을 위한 촉매 자동화 반응 및 평가용 신규 로봇 시스템 개발"
    Awarded by **Chairperson of National Research Council of Science & Technology (Dr. Bok Chul Kim)**
15. **Best Paper Award (2022):**
    최우수논문상 (한국태양에너지학회장 훈격)
    이제현, 유시현, 김창기, 오명찬, 김보영, 강용혁, 김현구,
    "SCOPUS 문헌 정보 분석을 통한 머신 러닝 활용 BIPV 연구 동향"
    Awarded by **President of Korean Solar Energy Society (Dr. Hyun-Goo Kim)**
16. **Collaboration Award (2021):**
    협업상 (한국에너지기술연구원장 훈격)
    이제현 (에너지+AI 학습조직)
    Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
17. **Invention Award (2021):**
    창안상 (한국에너지기술연구원장 훈격)
    연구 몰입도 향상 위원회 (이대근, 안승규, 송희은, 조임현, 황성목, 조원철, 김민진, 서민호, 박석인, 류승환, 서명원, 천동현, 윤민혜, 우중제, **이제현,** 송욱진, 권상훈)
    Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
18. **KIER-Tube Video Knowledge Contents Competition 1st Prize (2021):**
    KIER-Tube 동영상 지식콘텐츠 공모전 대상 (한국에너지기술연구원장 훈격)
    이제현, "논문 출판 동향 분석 feat. Python"
    Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
19. **Best Presenter Award (2021):**
    우수발표논문상 (한국태양에너지학회장 훈격)
    이제현, 배수민, 오명찬, 김창기, 강용혁, 김현구, "도심태양광 발전량 평가를 위한 건축물 음영 분석"
    Awarded by **President of Korean Solar Energy Society (Prof. Gi-Hwan Kang)**
20. **High Quality Reviewer Awards 1st Prize (2020):**
    "나는 고퀄 리뷰어다" (한빛미디어)
    이제현, "밑바닥에서 시작하는 딥러닝 3"
    Awarded by **Hanbit Media (Tae-Heon Kim)**
21. **Energy Award 2nd Prize (2020):**
    에너지대상 최우수상 (한국에너지기술연구원장 훈격)
    김현구, 김창기, 오명찬, 김진영, **이제현,** 김보영, 윤창열, 강용혁, "위성영상 기반 신재생에너지 발전 진단 및 변동성 예측"
    Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
22. **Collaboration Award Idea Contest (2020):**
    협업상 아이디어 공모전 (한국에너지기술연구원장 훈격)
    김덕환, **이제현**
    Awarded by **President of Korea Institute of Energy Research (Dr. Jong-nam Kim)**
23. **Best Paper Award (2019):**
    최우수논문상 (국토교통부장관 훈격)
    이제현, 원준호, 김창기, 윤창열, 송대현, 강용혁, 김현구, "도심지 건물일체형 태양광발전시스템을 위한 기계학습 기반의 건축물 음영 평가 모델 개발"
    Awarded by **Minister of Land, Infrastructure and Transport (Hyun-mee Kim)**
24. **Best Presenter Award (2019):**
    우수발표논문상 (한국태양에너지학회장 훈격)
    이제현, 원준호, 김창기, 윤창열, 송대현, 강용혁, 김현구, "태양광 발전을 위한 도심지 음영 평가 모델 개발"
    Awarded by **President of Korean Solar Energy Society (Prof. Doosam Song)**
25. **Probity Award (2018):**
    청렴상 (한국에너지기술연구원장 훈격)
    Awarded by **President of Korea Institute of Energy Research (Dr. Byong-Sung Kwak)**
26. **SEC Annual award (2017):** ***For Security, Full Title cannot be described here***
    삼성전자 연례기술상 (반도체 연구소장 훈격)
    D.-S. Kim and **Jehyun Lee** et al., achievement on Deep Learning application on semiconductor development, 3rd Prize
    Awarded by **President of Semiconductor R&D Center (Executive VP, Ho Kyu Kang),**
    Semiconductor R&D Center, Samsung Electronics.

27. **Future Creator award (2017):** *For Security, Full Title cannot be described here*
    미래창조상 (반도체 연구소장 훈격)
    D.-S. Kim and **Jehyun Lee** et al., achievement on Deep Learning application on semiconductor development, 3rd Prize
    Awarded by **President of Semiconductor R&D Center (Executive VP, Ho Kyu Kang),**
    Semiconductor R&D Center, Samsung Electronics.
28. **Future Creator award (2016):** *For Security, Full Title cannot be described here*
    미래창조상 (반도체 연구소장 훈격)
    J-.H. Jeong and **Jehyun Lee** et al., achievement on 3D Modeling & Image analysis, 1st Prize
    Awarded by **President of Semiconductor R&D Center (Executive VP, Eun Seung Jung),**
    Semiconductor R&D Center, Samsung Electronics.
29. **TCADer Tech. award (2016):** *For Security, Full Title cannot be described here*
    CAE 기술상 (CAE 팀장 훈격)
    Nam-Hyun Kim and J. Lee et al., achievements on 3D Modeling
    Awarded by **CAE Team Leader (VP, Keun Ho Lee),**
    Semiconductor R&D Center, Samsung Electronics.
30. **Samsung Paper Award (2015):** *For Security, Full Title cannot be described here*
    삼성논문상 본선진출 (반도체 연구소장 훈격)
    K. Kim and **Jehyun Lee** et al., study on 3D NAND process, 5th Prize
    Awarded by **President of Semiconductor R&D Center (Executive VP, Eun Seung Jung),**
    Semiconductor R&D Center, Samsung Electronics.
31. **Semiconductor R&D Center TRIZ competition (2015): For Security, Full Title cannot be described here**
    반도체연구소 TRIZ 경진대회 (반도체 연구소장 훈격)
    Jehyun Lee, achievements on 3D visualization, 4th Prize, Certified as TRIZ Expert (Lv.2)
    Awarded by **President of Semiconductor R&D Center (Executive VP, Eun Seung Jung),**
    Semiconductor R&D Center, Samsung Electronics.
32. **Unsung Hero in DS Division (2015):** *For Security, Full Title cannot be described here*
    숨은 일꾼상 2 분기 단독 수상 (DS 부문장 권오현 부회장 훈격)
    Jehyun Lee, achievements on image analysis related work, 1st Prize
    Awarded by **President of Device Solutions Division (Vice Chairman & CEO, Oh Hyun Kwon),**
    Samsung Electronics.
33. **Specialist in Creation (2015): For Security, Full Title cannot be described here**
    창조전문가 상반기 최우수상 (메모리 사업부장 훈격)
    Sejun Park and **Jehyun Lee** et al., achievements on 3D NAND, 1st Prize
    Awarded by **President of Memory Business (President, Young-Hyun Jun),**
    DS Division, Samsung Electronics.
34. **TCADer Tech. award (2015):** *For Security, Full Title cannot be described here*
    CAE 기술상 (CAE 팀장 훈격)
    J. Lee et al., achievements on 3D NAND image analysis
    Awarded by **CAE Team Leader (VP, Young Kwan Park)**
35. **BRAVO Paper award (2014):** *For Security, Full Title cannot be described here*
    BRAVO 논문상 (CAE 팀장 훈격)
    J. Lee et al., study on 3D NAND process, 3rd Prize
    Awarded by CAE Team Leader (VP, Young Kwan Park),
    Semiconductor R&D Center, Samsung Electronics.
36. **Best poster award (2011)**
    J. Lee, V. Alexandrakis, M. Fuger, D. Suess, D. Niarchos and J. Fidler, "Micromagnetic simulations on FePt $L1_0$/A1 phase graded media", Apr. 25–29, 2011, Intermag Conference 2011, Taipei International Convention Center, Taipei, Taiwan.
37. **Chosen as a "Research Highlights" in Journal of Applied Physics (2010)**
    V. Alexandrakis, D. Niarchos, K. Mergia, **Jehyun Lee,** J. Fidler, I. Panagiotopoulos, "Magnetic Properties of Graded Al/L10 films obtained by heat-treatment of FePt/CoPt multilayers", J. Appl. Phys., 107 (2010) 013903.

COMMUNITY ACTIVITY (35)

2024

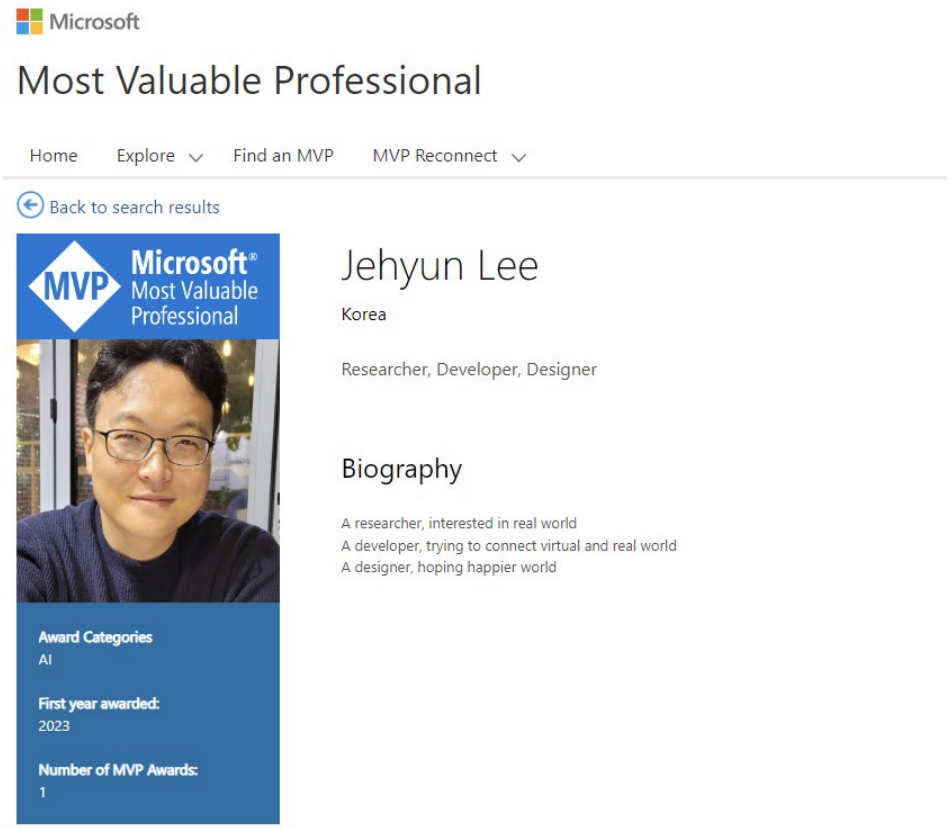
1. MK Speaker
   MK Speaker, 매일경제
   URL: http://www.mkspeaker.co.kr/speaker_view.php?no=345
2. Regular Reviewer, of IT books of Hanbit Media
   나는 리뷰어다 (한빛미디어)
3. NST Digital Transformation & Consilience Specialist
   국가과학기술연구회 디지털전환 및 융합 R&D 전문가 위원
4. MVP (AI), Microsoft
   MVP (Most Valuable Professional) AI 부문 (Microsoft)
   URL: https://mvp.microsoft.com/en-us/PublicProfile/5005119?fullName=Jehyun%20Lee
5. Board Member, AIFrenz
   이사, 사단법인 에이아이프렌즈(AI 프렌즈) 학회
   URL: http://aifrenz.org/
6. Member, of RPA Study Group in Korea Institute of Energy Research
   RPA 학습조직 위원 (한국에너지기술연구원)
7. Member, of AI Community in Korea Institute of Energy Research
   AI 학습조직 위원: 에너지+AI (한국에너지기술연구원)

2023

8. MK Speaker
   MK Speaker, 매일경제
   URL: http://www.mkspeaker.co.kr/speaker_view.php?no=345

9. Regular Reviewer, of IT books of Hanbit Media
   나는 리뷰어다 (한빛미디어)
10. Organizer, of AI Community in Korea Institute of Energy Research
    AI 학습조직 위원장: 에너지+AI (한국에너지기술연구원)
11. MVP (AI), Microsoft

MVP (Most Valuable Professional) AI 부문 (Microsoft)
URL: https://mvp.microsoft.com/en-us/PublicProfile/5005119?fullName=Jehyun%20Lee



12. Board Member, AIFrenz
    이사, 사단법인 에이아이프렌즈(AI 프렌즈) 학회
    URL: http://aifrenz.org/

2022

13. Beta Reader, “어쩌다 데이터 분석”
    베타리더, “어쩌다 데이터 분석” (한빛미디어, 2022.09.)
    URL: https://www.hanbit.co.kr/store/books/look.php?p_code=B7520909011
14. Regular Reviewer, of IT books of Hanbit Media
    나는 리뷰어다 (한빛미디어)
15. Organizer, of AI Community in Korea Institute of Energy Research
    AI 학습조직 위원장: 에너지+AI (한국에너지기술연구원)
16. Beta Reader, “그림으로 이해하는 인지 과학”
    베타리더, “그림으로 이해하는 인지 과학” (길벗, 2022)
17. Mentor, of Data Mentoring
    데이터 멘토링: 팀 와이즈(권로지, 김여진, 박민영, 이주연)
    데이터 스토리: 데이터로 보는 기후변화와 질병의 관계 (to be published)
18. Board Member, AIFrenz
    이사, 사단법인 에이아이프렌즈(AI 프렌즈) 학회
    URL: http://aifrenz.org/

2021

19. Mentor, of Data Mentoring
    데이터 멘토링: 팀 애이블(박예인, 김태인, 이재헌, 임가현, 허예영) – 최우수상 수상
    데이터 스토리: 데이터로 본 장애인 편의시설 정보 분석
    URL: https://www.bigdata-map.kr/datastory/new/story_31
20. Contributor, of Data Story
    데이터 스토리: 데이터로 보는 개봉 영화 (1) 장르, (2) 박스오피스
    URL: https://www.bigdata-map.kr/datastory/new/story_23,
    https://www.bigdata-map.kr/datastory/new/story_24
21. Monitor Agency, Big Data Map

모니터링단, 통합 데이터 지도 데이터 품질 검사
URL: https://www.bigdata-map.kr/

22. **Regular Reviewer, of IT books of Hanbit Media**
나는 리뷰어다 (한빛미디어)
23. **Organizer, of AI Community in Korea Institute of Energy Research**
AI 학습조직 위원장: 에너지+AI (한국에너지기술연구원)
24. **Beta Reader, "파이썬으로 캐글 뽀개기"**
베타리더, "파이썬으로 캐글 뽀개기" (비제이퍼블릭, 2021)
URL: https://bjpublic.tistory.com/417
25. **Beta Reader, "fastai와 파이토치가 만나 꽃피운 딥러닝"**
베타리더, "fastai와 파이토치가 만나 꽃피운 딥러닝" (한빛미디어, 2021)
URL: https://hanbit.co.kr/store/books/look.php?p_code=B7970422863
26. **Beta Reader, "한 줄씩 따라해보는 파이토치 딥러닝 프로젝트 모음집"**
베타리더, "한 줄씩 따라해보는 파이토치 딥러닝 프로젝트 모음집" (비제이퍼블릭, 2021)
URL: https://bjpublic.tistory.com/414
27. **Recommendation, "실무 프로젝트로 배우는 데이터분석 with R"**
추천사, "실무 프로젝트로 배우는 데이터분석 with R" (위키북스 2021)
URL: https://wikibook.co.kr/practical-r/
28. **Beta Reader, "데이터가 뛰어노는 AI 놀이터, 캐글"**
베타리더, "데이터가 뛰어노는 AI 놀이터, 캐글" (한빛미디어, 2021)
URL: https://www.hanbit.co.kr/media/books/book_view.html?p_code=B4998513859
29. **Recommendation, "The Secret Life of Programs"**
추천사, "한 권으로 읽는 컴퓨터 구조와 프로그래밍" (책만 2021)
URL: https://www.onlybook.co.kr/entry/secret-programs
30. **Beta Reader, "Practical Time Series Analysis"**
베타리더, "실전 시계열 분석" (한빛미디어, 2021)
URL: https://www.hanbit.co.kr/store/books/look.php?p_code=B9090689318

2020

31. **Monitor Agency, Big Data Map**
모니터링단, 통합 데이터 지도 데이터 품질 검사
URL: https://www.bigdata-map.kr/
32. **Beta Reader, "Hands on Machine Learning 2nd Ed. Korean Edition":**
베타리더, "핸즈온 머신러닝" (한빛미디어, 2020)
URL: https://www.hanbit.co.kr/store/books/look.php?p_code=B7033438574

2012

33. **Secretary**
Spin Dynamics in Nanomagnets, satellite workshop of ICM2012,
August 15–18, 2012, Hoam Faculty House, Seoul National University, Seoul, Korea.

2010

34. **Editor, Book of Proceedings**
EU-Korea Conference on Science and Technology 2010,
July 29–31, 2010, The Vienna Imperial Riding School, Vienna, Austria.
35. **Program Committee**
EU-Korea Conference on Science and Technology 2010,
July 29–31, 2010, The Vienna Imperial Riding School, Vienna, Austria.

2007

36. **Official home page design, official poster design and web programming**
The 4th Conference of the Asian Consortium on Computational Materials Science,
September 13–16, 2007, Korea Institute of Science and Technology, Seoul, Korea.

2006

37. **Conference Poster Design**
The International Conference on Advanced Structural Steels,
August 22–24, 2006, Gyeongju Hilton Hotel, Gyeongju, Korea.

COMPUTER SKILLS

Programming Languages:	Python, C/C++
Graphics Programs:	Digital Micrograph, ImageJ, Photoshop
CAD and Visualizations:	Python Matplotlib ecosystem, AutoCAD, GiD, Salome, Tecplot, Paraview

SOFTWARE CERTIFICATES

2017

1. SW Certificate: Advanced 알고리즘 등급시험
   Samsung Electronics
2. SW Expert
   Samsung Electronics

1999

3. Engineer Information Processing 정보처리기사
   Human Resources Development Services of Korea 한국산업인력공단

EXPERIMENTAL SKILLS

Specimen Preparation:	PECVD, DC/RF magnetron sputtering, Ion Milling, PIPS
Micro / Nano Fabrication:	Mask aligner(MA-6), Wire bonder (KIST)
	TEM specimen preparation (Vienna University of Technology)
Microscopy:	AFM (licence A: Korea Institute of Science and Technology)
	MFM (licence A: Korea Institute of Science and Technology)
	TEM JEOL CM20 (licence C: Seoul National University)
	TEM TECNAI F20 (full time user, Vienna University of Technology)

LANGUAGES

Native Language:	Korean	
Other Languages:	English*	German
Reading skills	fluent	basic
Writing skills	fluent	basic
Verbal skills	fluent	basic

*Samsung Electronics internal certifications on English proficiency @2016: TOEIC 940, OPIc AL