# KwanMyung Kim

Tenured Full Professor kmyung@unist.ac.kr Office: +82-52-217-2714 Mobile: +82-10-6208-3899

901-3, 104dong, UNIST-gil 50, Ulsan, 44919, Republic of Korea

http://iidl.unist.ac.kr, http://idspace-co.com



### **AREA OF RESEARCH INTERESTS**

Integrated Design Process & Method, Design Engineering, Design-led Entrepreneurship Intelligent Robot-Service System Design. Human-Robot Interaction Design for Elderly, Rehabilitation Design, Healthcare & Safety Design

### **EDUCATION**

02/2008 - 08/2014	<b>PhD.</b> Industrial Design, Korea Advanced Institute of Science and Technology, South Korea Thesis title: "Collaborative Product Design Processes between Industrial Designers and Engineering Designers – A Case Study of Six Consumer Product Companies"
03/1992 – 02/1994	<b>MSc,</b> Industrial Design, Korea Advanced Institute of Science and Technology, South Korea Thesis title: "A Study on The Application of Concurrent Engineering Concept in Industrial Design Practice"
03/1987 – 02/1992	BSc, Industrial Design, Korea Advanced Institute of Science and Technology, South Korea
1995-1996	Automobile Design Department, Samsung Innovative Lab of Samsung (In-house design training institute)

### **PROFESSIONAL EXPERIENCE**

Academia 03/2022 – Present 03/2016 – 02/2022 06/2010 – 02/2016	Full Professor, Design Department, UNIST, Ulsan Korea Associate Professor, Design Department, UNIST, Ulsan Korea Assistant Professor, School of Design and Human Engineering, UNIST, Ulsan Korea
03/2016 - 02/020 09/2013 - 02/2018	<b>Dean</b> , Graduate School of Creative Design Engineering, UNIST ( <i>Played a decisive role in developing the Graduate School of Creative Design Engineering</i> ), Ulsan Korea <b>Industrial Design Track Coordinator</b> , School of Design and Human Engineering, UNIST, Ulsan Korea

Industry	
01/2019 - Present	CEO, Founder of ID SPACE Corp., Ulsan Korea, (a UNIST faculty startup company to commercialize
	UNIST design research outcomes. Released a RedDot Design Award Winner, ' <b>UCUBE</b> ' in the
	market in 2021.)
06/2006-01/2008	Director in Product Design, Spring Time Corp. (Design Consulting Company), Seoul Korea
05/2000 - 05/2006	Senior Design Engineer / Co-founder, HESI (Venture Company), Kiheung Korea
12/1998 - 04/2000	Senior Product Designer / Co-founder, Design Dream Corp. (Design Consulting Company), Seoul
	Korea
02/1994 – 11/1998	Product Designer, Samsung Heavy Industries Ltd., Seoul Korea

### PROFESSIONAL ACTIVITIES AND SERVICE

### Journal - Editorial Board

2015 – Present Editor of 'Archives of Design Research,' (Scopus-indexed International Journal: Q1 in visual Arts and

Performing Arts, Q2 in Architecture)

2021 – Present Editor (industrial Design) of 'ICONARP International Journal of Architecture and Planning,' (ESCI

Indexed International Journal)

### **Academic Community**

2018 – Present	Executive Director of Korean Society of Design Science
2012 – 2017	<b>Director</b> of Korean Society of Design Science
2013 – 2021	Member of The Design Society
2014 – 2019	Member of Design Research Society
2012 –	Lifetime Member of Ergonomics Society of Korea
2012 – 2014	<b>Director</b> of Korean Society of Mechanical Engineers: Manufacturing & Design Engineering Division

### Design Award Juror or Advisor / International

- 1. Juror of SPARK Design Award Summer Entry, Online, June. 2020
- 2. Advisor of SPARK Design Award, 2017 Present
- 3. Juror of SPARK Design Award Winter Entry, Hong Kong, December 2017
- 4. Juror of SPARK Design Award Spring Entry, San Francisco, July 2017

### Design Award Juror / National

- 1. Juror of KSDS International Fall Design Exhibition, October 2018
- 2. Juror of KSDS International Design Exhibition, November 2014

### Committee Member, Juror or Advisor/ National

- 1. Expert Committee Member for Developing the Plan for Design Innovation Capability Enhancement Project Reform, Korea Evaluation Institute of Industrial Technology (KEIT) (January 2024)
- 2. Online Evaluation of Research Achievements for the 4th Stage BK21 Project, National Research Foundation of Korea (NRF) (June 23-29, 2023)
- 3. First Advisory Committee Member for the AI Design Park Initiative (Tentative Name), Korea Evaluation Institute of Industrial Technology (KEIT) (February 2023)
- 4. Advisory Committee Member for Planning New Projects in the Design Field for 2023, Korea Evaluation Institute of Industrial Technology (KEIT) (January February 2022)
- 5. Advisory Committee Member for Project Planning of the 2022 Design Innovation Capability Enhancement Project, Korea Evaluation Institute of Industrial Technology (KEIT) (November December 2021)
- 6. Research Committee Member for Discovering Design Convergence Projects, Gwangju Institute of Design Promotion (July November 2021)
- 7. Design Consultant of Korea Land & Housing Corporation (LH) (July 2021 June 2023)
- 8. Committee Member for Investment Strategy Formulation for the Sustainable Development of Design Industry Technology Development Projects, Korea Evaluation Institute of Industrial Technology (KEIT) (May July 2021)
- Advisory Committee Member for Research Planning of Design Core Technology Development Projects, Korea Institute of Design Promotion (KIDP) (February 2021)
- Evaluation Committee Member for the Design Innovation Capability Enhancement Service Design-Based New Manufacturing Ecosystem Construction Technology Development Project, Daegu Gyeongbuk Design Center (December 2019, November 2020)

- 11. Committee Member of the Intellectual Property Committee, Ulsan Metropolitan City (November 2020 November 2024)
- 12. Program Manager of the Arts, Culture and Convergence Division in Directorate for Humanities & Social Sciences, National Research Foundation of Korea (NRF) (September 2019 August 2021)
- 13. Committee Member of the Design R&D Expert Planning Meeting for the Design Innovation Capability Enhancement Project, Korea Evaluation Institute of Industrial Technology (KEIT) (November 2020)
- 14. Advisory Committee Member for Planning New Tasks of the 2021 Design Innovation Capability Enhancement Project, Korea Evaluation Institute of Industrial Technology (KEIT) (September 2020)
- 15. Design Consultant of Korea Land & Housing Corporation (LH) (June 2019 May 2021)
- 16. Advisor for Establishing the Mid- to Long-Term Roadmap for Economic Development of Changwon, Changwon Research Institute (March 2019)
- 17. Committee Member for Establishing Follow-up Design Convergence TRL Evaluation Indicators for the 2019 Industrial Technology R&BD Strategy (Design Convergence Field), Korea Evaluation Institute of Industrial Technology (KEIT) (February 2019)
- 18. Committee Member for the 2019 Design Convergence R&BD Strategy Planning Meeting, R&D Strategy Planning Division, Ministry of Trade, Industry and Energy (MOTIE) (May 2018)
- 19. Landscape Ordinance Committee Member, Jung-gu, Ulsan Metropolitan City (January 2018 December 2019)
- 20. Online Evaluation Committee Member for Selecting New and Existing Tasks for Early Career Researchers, Culture Convergence Division, National Research Foundation of Korea (NRF) (April 2017)
- 21. Expert member in the 4th Industrial Revolution Design/Lifestyle Industry Research Subcommittee Meeting chaired by the First Vice Minister of the Ministry of Trade, Industry and Energy, Korea Institute of Design Promotion (January 2017)
- 22. Advisory Committee Member for Planning the 2016 Design Innovation Capability Enhancement Project, Korea Evaluation Institute of Industrial Technology (KEIT) (November December 2015)
- 23. Advisor, Kyongbuk Science High school Imagination & Development Program (2015) (The team won a prize at the 2017 Science Talented I&D Competition)
- 24. Mentor, Creative Economy Town (2015)
- 25. Evaluation Committee Member for Industry-University Linked Design Development and Rights Acquisition Project, Ulsan Intellectual Property Center (June 2013)
- 26. Progress Review Committee Member for Knowledge Service Industry Source Technology Development Project, Korea Evaluation Institute of Industrial Technology (KEIT) (April 2013)
- 27. Evaluation Committee Member for the First Half of 2013 Mid-Career Researchers Support Program Challenge Convergence Research, National Research Foundation of Korea (April 2013)
- 28. Online Evaluation Committee Member for New Projects of the 2013 Mid-Career Researchers Support Program, National Research Foundation of Korea (April 2013)
- 29. Online Evaluation Committee Member for New Projects of the 2013 Early Career Researchers Support Program, National Research Foundation of Korea (March April 2013)
- 30. Committee Member of the Selection Evaluation Committee for the 2012 Knowledge Service Industry Support Program, Ulsan Techno Park (May 2012)
- 31. Judge for the 10th UCI Robotics Competition, Ulsan Chamber of Commerce and Industry (May 2012)
- 32. Specialist Committee Member for Ulsan Knowledge Center, Ulsan Chamber of Commerce and Industry (2012)
- 33. Committee Member of the Evaluation Committee for Contracting the DesignMap Database Construction and Operation Management Project, Korean Intellectual Property Office (KIPO) (April 2012)
- 34. Advisory Committee Member for Korea Design Membership Program, Busan Design Center (2012)

- 35. Subcommittee Member for IT Convergence Design Research in the Preliminary Product Discovery Section, Daegu Gyeongbuk Design Center (2011)
- 36. Evaluation Committee Member for Proposal Evaluation of Exhibition Materials Production and Installation at the Taehwagang Eco-Education Center, Ulju County Office (November 2011)
- 37. Advisory Committee Member for Future Business Planning in New Industries, R&D Strategy Planning Division in Ministry of Knowledge Economy (October December 2011)
- 38. Advisory Committee Member for the 2nd Workshop of the 2010 Total Design Development Project, Korea Evaluation Institute of Industrial Technology (KEIT) (March 2011)
- 39. Advisory Committee Member for Exploration and Cultivation of New Design Fields in the Design Brand Policy Division, Ministry of Knowledge Economy (December 2010)

### Conference – Organizational / International (+13 conferences & workshops)

- 1. Track Chair (Product and Production) of IASDR 2023
- 2. Associate Chair of IASDR 2021 (2021)
- 3. Scientific Advisory Board Member, Track on Interdisciplinary Practice in Industrial Design Session at International Conference on Applied Human Factors and Ergonomics; AHFE 2017, 2018, 2019, 2020, 2021 (2017-2021)
- 4. Organizing Member for Design Thinking Research Symposium; DTRS 12 (2017-2018)
- 5. Organizing Member for 2018 Global Design Workshop, Shibaura Institute of Technology (2018)
- 6. Program Committee Member & Associate Chair for the Provocations and Works-in-Progress(PWiP) track of the ACM SIGCHI Conference on Designing Interactive Systems; DIS 2018, (2018)
- 7. Organizing Member for 2017 Oceania Design Workshop, Shibaura Institute of Technology (2017)
- 8. Organizing Member for Asia-Design Engineering Workshop 2017 (2017)
- 9. International Program Committee Member for ICoRD'17 (2016 2027)
- 10. Program Committee Member for 2012 Design Engineering Workshop (2012)

### **Conference – Organizational / National** (13 conferences)

- 1. Co-organizing chair, 2022 KSDS International Spring Conference (2022)
- 2. Co-organizing chair, 2018 KSDS International Fall Conference (2018)
- 3. Academic Committee Member for HCI Korea 2017, 2018, 2019 (2016-2018)
- 4. Organizing Committee Member for 2017 & 2019 KSDS International spring & fall conference (2017, 2019)
- 5. Executive Committee Chair for International Design Symposium and 2014 KSDS fall conference (2014)
- 6. Organizing Committee Member for 2014 KSDS International spring conference (2014)
- 7. Doctoral Consortium Coordinator for HCI Korea 2015 (2015)
- 8. Program Coordinator for ESK 2013 spring conference (2013)
- 9. Workshop Coordinator for HCI Korea 2012 (2011)

### **Conference – Session Chair** (+20 conferences)

- International: 18th International Design Conference(2024), IASDR 2023, IPID at AHFE 2021 (2021), IPID at AHFE 2017 (2017)
- National: KSDS International Conferences (2012 spring, 2013 spring & fall, 2016 fall, 2017-2021 spring & fall), KSDS & Cumulus 2015 international fall conference (2015); 2013 One Conference Seoul (2013), HCI Korea 2012 (2012), The Ergonomics Society of Korea 2013 Spring Conference (2013)

### Journal Paper Reviewer (+10 journals)

- International: She Ji: The Journal of Design, Economics, and Innovation, Archives of Design Research, International Journal of Engineering Education
- National: Journal of Digital Interaction Design; Journal of Integrated Design Research, Design Convergence Study, Creative Management Research, Journal of the HCI Society of Korea, Science of Emotion and Sensibility

### **Conference Paper Reviewer** (+25 conferences)

- International: AHFE2024, IASDR 2023, IASDR 2021, ACM DIS (2018); Cumulus (2015), LearnxDesign(2015), DRS Cumulus(2013); HFES 2012 (2012); Cumulus-DRS Design Education Symposium (2011);
- National: KSDS International Design Conference (2012 2024); KHCI (2016 2023)

### **AWARDS & HONORS**

<u>Underlined names</u> indicate students, starred names\* indicate the lead designer, and KM Kim\*\* indicates awards where KM Kim serves as the lead designer with students under his direct supervision. (names) indicates the role of advisor.

### **Government Award**

1. KM Kim, Recipient, the Minister of Trade, Industry and Energy Award for Excellent Contributor to Training Industrial Professionals through related Government Project, December 19, 2019

### **Design Awards & Certifications**

- 1. M Gabbais, Y Ismailov, KM Kim\*\*, Winner at iF Design Award 2022, 'UMAY'
- 2. JH Park, M Gabbais, YD Ryu, KM Kim\*\*, Winner of Best of the Best at RedDot Design Award 2021, 'GOOPI'
- 3. SJ Joo, DB Lee, JY Lee, HM Choi, HJ Jin, SY Park, H Kim, KM Kim\*\*, Winner at iF Design Award 2021, 'Wave hat'
- 4. JY Lee, HM Choi, HJ Jin, SY Park, DB Lee, SJ Joo, H Kim, KM Kim, Winner at iF Design Award 2021, 'Wave app'
- 5. JH Park, YD Ryu, M Gabbas, KM Kim\*\*, Winner at iF Design Award 2021, 'GOOPI'
- 6. <u>SJ Joo, JY Lee, HJ Jin, YD Ryu, (H Kim, KM Kim\*\*),</u> "Team WaveHat," Winner of Minister Award from Ministry of Trade, Industry and Energy at 2020 Industry-Academic Project Challenge, MOTIE, November 30, 2019, KIDP
- 7. <u>HB Lee, SH Lee, SJ Park, (HS Lee, KM Kim\*\*),</u> "Team Anybaro," Winner of Minister Award from Ministry of Trade, Industry and Energy at 2020 Industry-Academic Project Challenge, MOTIE, November 30, 2019, KIDP
- 8. JH Yang, KM Kim\*\*, "U.CUBE," Selected as Global Premium Living Goods, Hosted by Ministry of Trade, Industry & Energy. Organised by KIDP. November 6, 2019
- 9. JH Yang, KM Kim\*\*, "U.CUBE," Selected as Good Design Product, September 2019, KIDP
- 10. KM Kim, Recipient, 'The One-millionth Certificate of Design Registration' Signed by National President, Blue House, September 19, 2019
- 11. YD Ryu, M Gabbais, KM Kim\*\*, Winner at iF Design Award 2019, '\$100 Library'
- 12. SY Kim, KM Kim\*\*, Gold Prize Winner at Spark Design Award 2018, 'MWR'
- 13. YD Ryu, HB Lee, KM Kim\*\*, Gold Prize Winner at Spark Design Award 2018, '\$100 Library'
- 14. M Gabbas, HB Lee, KM Kim\*\*, Bronze Prize Winner at Spark Design Award 2018, 'Anybaro'
- 15. A Makenov, HB lee, KM Kim\*\*, Winner at RedDot Design Award 2018, 'Toguz Korgool'
- 16. HB Lee, KM Kim\*\*, Special Award Winner at 2017 KSDS International Design Exhibition, 'SORI,' June 2 2018
- 17. JH Yang, HB Lee, KM Kim\*\*, Winner at RedDot Design Award 2017, 'Maze Cube'
- 18. NR Moon, MJ Kim, WI Jang, KM Kim\*\*, Bronze Prize Winner at IDEA Design Excellence Awards 2017, 'SONORE'
- 19. JH Yang, HB Lee, KM Kim\*\*, Gold Prize Winner at Spark Design Award 2017, 'Maze Cube'
- 20. JH Hyun, SY Ryu, JY Ryu, (KM Kim), Grand Prize Winner at 1<sup>st</sup> Dongbu Daewoo Electronics Idea Competition, 'Milda,' November 14, 2014
- 21. <u>HB Lee</u>, KM Kim\*\*, Gold Prize Winner at 14th CADCAM Competition, Society of CAD/CAM Engineers, Sponsored by Ministry of Knowledge Economy, August 14, 2013

- 22. SK Kwon, (KM Kim), Gold Prize Winner at 13th CADCAM Competition, Society of CAD/CAM Engineers, Sponsored by Ministry of Knowledge Economy, August 24, 2012
- 23. <u>KM Cho</u>, (KM Kim), Bronze Prize Winner at 13th CADCAM Competition, Society of CAD/CAM Engineers, Sponsored by Ministry of Knowledge Economy, August 24, 2012
- 24. SM Ko, YR Kim, DY Kim, SY Park, GH Kyung\*\*, KM Kim\*\*, 2nd Prize Winner at 3rd Co-Creative Design Competition, Global Integration Design Education Institute of Seoul National Univ., November 1, 2013
- 25. <u>HG Park</u>, KM Kim\*\*, 2nd Place Winner at Odyssey of the Mind World Finals (World Creativity Olympiad), Creative Competition Inc., Sponsored by NASA, May 26, 2012 (more than 800 entries from 25 countries. UNIST President referred to it in the media as a representative student achievement of UNIST: e.g. Hankuk newspaper, September 29 2013)
- 26. SM Ko, YR Kim, DY Kim, SY Park, (GH Kyung), (KM Kim), 2dn Prize Winner at Capstone design competition, Ergonomics Society of Korea, October 10, 2013
- 27. <u>DY Lee, DY Kang, BD Kim, TY Kim</u>, (KM Kim), Grand Prize Winner at 2nd Soongsil Industry Convergence Idea Competition, December 18, 2013
- 28. <u>HK Park, KS Park, DH Kim, MR Han, KJ Kim, HK Kim</u>, (KM Kim), Silver Prize Winner at 2012 Korea Odyssey of the Mind (Korea Student Creativity Olympiad), Korea Odyssey of the Mind, Sponsored by Ministry of Education and Science & Knowledge Economy, March 5, 2012
- 29. KM Kim, Encouragement Award at 2008 KAIST Invention Idea Competition

### **Academic Awards**

- 1. M Gabbais, YD Ryu, JH Park, KM Kim\*\*, "Understanding challenges of designing for complex users by adapting the existing framework," selected as an AHFE 2021 Best Student Paper at Applied Human Factors and Ergonomics 2021 and its Affiliated Conferences
- 2. KM Kim, Recipient, The Outstanding Teacher Award in Education, UNIST, March. 31, 2020
- 3. KM Kim, Recipient, Excellent Research Advisor Award of 2019 Fall DSUS at 2019 KSDS Fall International Conference, KINTEX, November 9, 2019
- 4. <u>Malika Gabbas</u>, KM Kim\*\*, "Understanding 'Detail Design' Phase Using 3D CAD: A Preliminary Analysis of 'Anybaro' Project," Awarded The Best Paper Award at 2019 Fall DSUS *2019 KSDS Fall International Conference*, KINTEX, November 9, 2019
- 5. <u>B.A. Mezra, KM Kim\*\*</u>, "Designing Filament Recycler for fused deposition Modeling 3D-Printer," Awarded Encouragement Award at 2019 Fall DSUS 2019 KSDS Fall International Conference, KINTEX, November 9, 2019
- 6. <u>SY Kim, KM Kim\*\*, "A UI Design Case for a Software in a New Industry Domain which is unable to take User Study,"</u>
  Awarded Encouragement Award at 2019 Fall DSUS 2019 KSDS Fall International Conference, KINTEX, November 9, 2019
- 7. <u>DK Kim</u>, KM Kim\*\*, "Introduction and Reflection of 'Action-based Inquiry' Employed in User Research," Awarded Excellent Paper Award from Korea Society of Design Science, 2015, (Archives of Design Research, Vol 27. No. 2. pp149-163)

### Other Awards

1. KM Kim, Award for Idea Proposal in Gwacheon City, 2005

### **DESIGN EXHIBITION**

- 1. Invited exhibition of 'GOOPI: Data-Based Intelligent-Rehabilitation Device' at the 'Design + Health exhibition' held at MuVIM (Museu Valenciá De la II-lustració I de la Modernitat) as part of the Spain Valenciá 2022 World Design Capital program. Exhibition period: November 11, 2022, to April 16, 2023, for 5 months.
- Exhibited UCUBE products at the global startup event Slush 2022 held in Helsinki, Finland. Booth was open on November 17-18, 2022.HB Lee, KM Kim\*\*, 2017 KSDS International Invitation Exhibition, 'Lyun,' exhibited at the Paper Gallery of Doosungpaper, Seoul Korea, December 2017
- 3. MJ Kim, KM Kim\*\*, 2017 KSDS International Invitation Exhibition, 'PAV Frame,' exhibited at the Paper Gallery of Doosungpaper, Seoul Korea, December 2017
- 4. <u>SY Kim</u>, KM Kim\*\*, 2017 KSDS International Invitation Exhibition, 'RMSM,' exhibited at the Paper Gallery of Doosungpaper, Seoul Korea, December 2017
- 5. <u>HB Lee</u>, KM Kim\*\*, 2017 KSDS International Invitation Exhibition, 'SORI,' exhibited at the Paper Gallery of Doosungpaper, Seoul Korea, December 2017
- 6. <u>MJ Kim</u>, KM Kim\*\*, 2017 KSDS International Invitation Exhibition, 'UP2AV,' exhibited at the Paper Gallery of Doosungpaper, Seoul Korea, December 2017

### **PUBLICATIONS**

<u>Underlined names</u> indicate students, starred names\* indicate the corresponding author, and KM Kim\*\* indicates articles where KM Kim is the corresponding author with students under his direct supervision.

### **International Journals**

- 1. <u>M Tufail</u>, JH Park, H Kim, SH Kim, KM Kim\*\*, JH Lee\*, "How do visitors perceive the significance of tangible cultural heritage through a 3D reconstructed immersive visual experience at the Seokguram Grotto, South Korea?," Journal of Heritage Tourism, 2022, Vol. 17 No. 4, PP409 430, http://dx.doi.org/10.1080/1743873x.2022.2039672
- 2. <u>M Tufail, HB Lee, YG Moon, H Kim, KM Kim\*\*, "Interdisciplinary Co-Design Research Practice in the Rehabilitation of Elderly Individuals with Chronic Low Back Pain from a Senior Care Center in South Korea," Applied Sciences, 2022, 12(9), https://doi.org/10.3390/app12094687</u>
- 3. <u>M Tufail, HB Lee,</u> YG Moon, H Kim, KM Kim\*\*, "Effects of standing exercise tasks with a sloped surface intervention on trunk muscle activation and low-back pain intensity in women aged >70 years," International Journal of Human Factors and Ergonomics, 2021, Vol.8 Issue 3, pp245-257 (Scopus)
- 4. <u>M Tufail, HB Lee,</u> YG Moon, H Kim, KM Kim\*\*, "The effect of lumbar erector spinae muscle endurance exercise on perceived low-back pain in older adults," Physical Activity Review, Vol.9 Issue 2, pp82-92, September 22 2021 (ESCI, Scopus, Q2 in Health / Rehabilitation)
- 5. M Gabbas, KM Kim, J Self \*, "Color in Package Design: A Case Study of User Response to Skincare Packaging Color," Archives of Design Research, Vol. 34 Issue 1, pp 5-19, February 2021 (Scopus)
- MC Chang, SW Park, JY Cho, BJ Lee, JM Hwang, KM Kim, DH Park\*, "Comparison of three different types of exercises for selective contractions of supra- and infrahyoid muscles," Scientific Reports, Nature Publishing, Vol. 11 Issue 1, March 30 2021 (SCI)
- 7. SW Park, JY Cho, BJ Lee, JM Hwang, MH Lee, SY Hwang, KM Kim, KH Lee, DH Park\*, "Effect of the submandibular push exercise using visual feedback from pressure sensor: an electromyography study," Scientific Reports, Nature Publishing, Vol. 10 Issue 1, July 16 2020 (SCI)
- 8. <u>M. Tufail</u>, & KM. Kim. "Sustainable and ICT-Enabled Development in Developing Areas: An E-Heritage E-Commerce Service for Handicraft Marketing," Journal of Physics: Conference Series, Volume 989, Issue 1, 2018

- 9. M Tufail, KM Kim\*\*, "Effects of cursor freeze time on the performance of older adult users on mouse-related tasks," Applied Ergonomics, 65, pp175-182, June 2017 (SCI)
- 10. KM Kim, KP Lee\*, "Collaborative product design process of industrial design and engineering design in consumer product companies," Design Studies, June 2016 (SCIE)
- 11. Blair Kuys, KM Kim\*, "Viewpoint: design and engineering convergence education in a Korean and Australian context," Archives of Design Research, Vol 29. No. 2. pp5-21, 2016
- 12. EJ Kim, KM. Kim\*\*, "Cognitive styles in design problem solving: Insights from network-based cognitive maps." Design Studies, 40, 1-38, September 2015 (SCIE)
- 13. KM. Kim, KP Lee\*, "Don't make art, do industrial design: A voice from industry," Design Management Reviews, Vol. 25, No 1, pp40–45, April 2014
- 14. KM. Kim, NH. Kim\*, SH. Jung, DY. Kim, YS. Kwak, GH. Kyung, "A radically assembled design-engineering education program with a selection and combination of multiple disciplines," International Journal of Engineering Education, Vol. 28, No. 4, pp904–919, November 2012 (SCIE)

#### **Domestic Journal**

- 1. <u>DK Kim</u>, KM Kim\*\*, "Introduction and reflection of "Action-based inquiry" employed in user research," Archives of Design Research, Vol 27. No. 2. pp149-163, 2014 (Best paper award in 2015)
- 2. YH Kim, KM Kim\*\*, "Design constraints adopted by industrial design students in the concept design phase," Archives of Design Research, Vol 27. No. 2. pp199-213, 2014
- 3. KM Kim, "The current status of Integrated Industrial Design and Engineering Education," The Journal of Mechanical Science and Technology, Vol.54,No.3, 2013.03, pp61-66
- 4. KM Kim\*, "Understanding product design process as it fits into the interaction between industrial design and engineering design," Archives of Design Research, Vol 24. No. 6. pp4-31, 2011
- 5. KM Kim\*, and KY Nam, "Transforming the four-river restoration project into a design project," Journal of Korea Society of Design Science, Vol.23, No.3, pp297-308, May 2010.
- 6. KM Kim, "A Study on the Application of 3D Virtual Human in the prior stage of Design Works With the emphasis on the determining design layout of a forklift truck," Journal of Korea Society of Design Science, Vol.12, No.4, pp.293-303, (1999)
- 7. KM Kim & CY Lim, "A Study on The Application Concurrent Engineering Concept in Industrial Design Practice," Journal of Korea Society of Design Study, Vol.13, pp.27-42, (1996)

### Full Paper Publications in Peer-Reviewed International Conferences

- I Ulugbek, KM Kim\*\*, "Introducing a Framework to Translate User Scenarios into Engineering Specifications with
  "Action Steps," Proceedings of the Design Society, Volume 4: DESIGN 2024, May 2024, pp. 23 34, DOI:
  https://doi.org/10.1017/pds.2024.5
- 2. <u>DH Lee</u>, KM Kim\*\*, <u>A Saduakas, I Ulugbek, JS Kim, B Bertha</u>, "Dynamic personalities for elderly care robots: user-based Recommendations," IASDR 2023, Milan, Oct 09-13, 2023. https://doi.org/10.21606/iasdr.2023.546
- 3. JS Kim, KM Kim\*\*, A Saduakas, B Bertha, DH Lee, I Ulugbek, "Toward more considerate designing of home exercise equipment for older adults: a qualitative analysis of the specific needs and challenges of older adults for physical exercise," IASDR 2023, Milan, Oct 09-13, 2023. https://doi.org/10.21606/iasdr.2023.575
- 4. <u>M Tufail, X Wang, A Tian, X Li, SY Leung, S Uzma, HY Park</u>, KM Kim\*\*, "Exploring the design applications of key emerging materials from natural Sciences through a design ideation workshop," IASDR 2023, Milan, Oct 09-13, 2023, https://doi.org/10.21606/iasdr.2023.503
- 5. YD Ryu, KM Kim\*\*, "Constant Problem and Solution Space Investigation Method in a User Study Phase: Focusing on

- Early Elderly's Needs and Design Solutions Identification," DRS2022, Bilbao, June 25-July 3, 2022
- 6. <u>M Gabbas</u>, KM Kim\*\*, "Gamified User Interface Design for Dysphagia Rehabilitation based on Common Mental Models," DRS2022, Bilbao, June 25-July 3, 2022
- 7. <u>U.</u>Ismatullaev, A.Saduakas, KM Kim\*\*, "Human Factors Considerations in Design for the Elderly," 13th International Conference on Applied Human Factors and Ergonomics, Virtual Conference, July 24-28, 2022, in the book: Human Factors in Aging and Special Needs, Vol.38, pp23-33 (Scopus)
- 8. <u>A.Saduakas, U.Ismatullaev</u>, KM Kim\*\*, "Addressing the Gaps in Elderly Falling Prevention from the Perspective of a Human-Centered Design," 13th International Conference on Applied Human Factors and Ergonomics, Virtual Conference, July 24-28, 2022, in the book: Human Factors in Aging and Special Needs, Vol.38, pp150-156 (Scopus)
- 9. JH Park, M. Tufail, HB Lee, KM Kim\*\*, "The Design of Rehabilitation Device for Upper Limb After Stroke Using an Integrated Design Process," IASDR 2021, Hong Kong, December 6-8, 2021
- 10. M Gabbas, KM Kim\*\*, "Understanding Detail Design Phase Using 3D CAD: A Case Study on Anybaro," IASDR 2021, Hong Kong, December 6-8, 2021
- 11. <u>HB Lee, M Tufail</u>, KM Kim\*\*, "Classification of transformable products based on changes in product form and function," Proceedings of the Design Society, Volume 1, August 2021, pp. 641-650, 23rd International Conference on Engineering Design (ICED 21), Gothenburg, Sweden, August 16-20, 2021
- 12. M Gabbas, YD Ryu, JH Park, KM Kim\*\*, "Understanding Challenges of Designing for Complex Users by Adapting the Existing Framework," 12th International Conference on Applied Human Factors and Ergonomics, Virtual conference, July 25-29, 2021, in book: Advances in Interdisciplinary Practice in Industrial Design, pp74-80 (Scopus) (Best Student Paper)
- YD Ryu, M Gabbas, JH Park, KM Kim, "Slipper Design Opportunity Identification Based on Material and Manufacturing Process Characteristics," 12th International Conference on Applied Human Factors and Ergonomics, Virtual Conference, July 25-29, 2021, in book: Advances in Interdisciplinary Practice in Industrial Design, pp81-88 (Scopus)
- 14. JH Park, M Gabbas, YD Ryu, KM Kim\*\*, "Integrated Design Process for an Elbow Joint Rehabilitation Device," 12th International Conference on Applied Human Factors and Ergonomics, Virtual Conference, July 25-29, 2021, in the book: Advances in Interdisciplinary Practice in Industrial Design, pp65-73 (Scopus)
- 15. <u>DB Lee, SJ Joo, SY Park</u>, H Kim, KM Kim\*\*, "A Dimensional Themes' Matrix for Identifying Design Problem Structure," 11th International Conference on Applied Human Factors and Ergonomics, Virtual Conference, July 16-20, 2020, in book: Advances in Interdisciplinary Practice in Industrial Design, pp378-384 (Scopus)
- 16. SJ Joo, DB Lee, SY Park, H Kim, KM Kim\*\*, "Integrated Keyword Mapping Process: Bridging User Research to Style Concept Development," 11th International Conference on Applied Human Factors and Ergonomics, Virtual conference, July 16-20, 2020, in the book: Advances in Interdisciplinary Practice in Industrial Design, pp457-463 (Scopus)
- 17. <u>M Tufail</u>, YG Moon, KM Kim\*\*, "Rehabilitation Design Intervention for Older Adult Women through Community-based Co-Design Activities," The Proceedings of IASDR 2019, Manchester, UK, 2-5. September. 2019
- 18. M Tufail, SJ Park, HB Lee, YG Moon, KM Kim\*\*, "Discomfort with Low-back Pain Relief Exercise Training for Older Adult Women," 10th International Conference on Applied Human Factors and Ergonomics, Washington, July 24-28 2019, in the book: Advances in Interdisciplinary Practice in Industrial Design, pp283-288 (Scopus)
- 19. JH Yang, HS Jeon, M Tufail, KM Kim\*\*, "A Critical Usability Problem-Solving Case of MazeCube Through Design Exploration Based on Scientific Experiments," 10th International Conference on Applied Human Factors and Ergonomics, Washington, July 24-28 2019, in the book: Advances in Interdisciplinary Practice in Industrial Design, pp265-273 (Scopus)
- 20. M Tufail, MJ Kim, SJ Park, YG Moon, KM Kim\*\*, "An Ergonomic-based Postural Control and Balance body Exercise Design for Young Martial Art Trainees," 9th International Conference on Applied Human Factors and Ergonomics,

- Florida, July 22-26 2018, in the book: Advances in Interdisciplinary Practice in Industrial Design, pp143-150 (Scopus)
- 21. <u>HB Lee, M Tufail</u>, KM Kim\*\*, "The Development of Urban pilotless Personal Aerial Vehicle and Significant Considerations as a Design Project," 9th International Conference on Applied Human Factors and Ergonomics, Florida, July 22-26 2018, in the book: Advances in Interdisciplinary Practice in Industrial Design, pp130-142 (Scopus)
- 22. M Tufail, SM Lee, KM Kim\*\*, "A Toolkit For Teaching Design Process: A Case of Korean Elementary School Students," The Proceedings of DRS 2018, Limerik, Ireland, 25-28. June. 2018, pp2673-2688
- 23. <u>HB Lee, M Tufail, MJ Kim</u>, KM Kim\*\*, "Interaction between Client and Design Consultant: The Stance of Client to Design Consultant and Its Influence on Design Process," The Proceedings of IASDR 2017, Cincinnati, USA, 31.10.-03.11.2017
- 24. M Tufail, HB Lee, MJ Kim, KM Kim\*\*, "Passive monitoring in the workplace: Design guidelines for self-quantified employee feedback system," DS 87-1 Proceedings of the 21st International Conference on Engineering Design (ICED 17) Vol 1: Resource Sensitive Design, Design Research Applications and Case Studies, Vancouver, Canada, 21-25.08.2017. pp 91-100
- 25. MJ Kim, HB Lee, M Tufail, KM Kim\*\*, "Transformable Camping Cart Design for a Jack Company," International Conference on Applied Human Factors and Ergonomics, LA, July 17 2017, pp 398-406
- M Tufail, HB Lee, MJ Kim, KM Kim\*\*, The Design of Personal Protective Garments for Workplace: An Ergonomic Radiation Protection Design Practice," International Conference on Applied Human Factors and Ergonomics, LA, July 17, 2017. pp 416-425
- 27. <u>HB Lee, M Tufail, MJ Kim</u>, KM Kim\*\*, "Integrated Design Process: A Case of Recliner Design," International Conference on Applied Human Factors and Ergonomics, LA, July 17, 2017. pp 407-415
- 28. KM Kim, "How Companies adopt different design approaches," DRS2016, Design Research Society, Brighton, UK, June 27-30. 2016.
- 29. <u>HB Lee, M Tufail</u>, KM Kim\*\*, "Difficulties in transformable design and its causes," 14th International Design Conference, The Design Society, Dubrovnik Croatia, May. 2016
- 30. YH Kim, CJ Kim, KM Cho & KM Kim, "Barriers to hinder collaboration within product development teams from designers' perspective and the development of a method to facilitate the collaboration," In DS 80-11 Proceedings of the 20th International Conference on Engineering Design (ICED 15) Vol 11: Human Behaviour in Design, Design Education; Milan, Italy, July 27-30, 2015
- 31. KM Kim, KP Lee, "Industrial designers and engineering designers; causes of conflicts, resolving strategies, and perceived image of each other," The Proceedings of DRS2014, DRS2014, Design Research Society, Umea, Sweden, June 18, 2014
- 32. KM Kim, "How to teach 3D CAD to product design students providing integrated design experience," Proceedings of the Design 2014 13th International Design Conference, The Design Society, Dubrovnik Croatia, May 19, 2014, pp1399-1410
- 33. <u>EJ Kim</u>, KM Kim\*\*, "Idea Generation with Precedents," The Proceedings of IASDR2013, IASDR 2013, Tokyo, August 30, 2013, pp 2900~2911
- 34. KM Kim, "How do Industrial Design and Engineering Design Interact Together in Product Design Process," Poster Presentation, DRS2012, Bangkok Thailand, July 4. 2012
- 35. KM Kim, and KP Lee, "Two Types of Design Approaches regarding Industrial Design and Engineering Design in Product Design," 11th International Design Conference DESIGN2010, The Design Society, Dubrovnik Croatia, May 19, 2010. pp1795~1805.
- 36. KM Kim, DW Joo, KP Lee, "Wearable-object-based Interaction for a Mobile Audio Device," CHI2010 Work-in-progress, ACM, Atlanta, April 10-15, 2010.
- 37. KM Kim, SK Choi, and KP Lee, "The affection of cursor frozen time to children's mouse interface," Designing for Children, Mumbai, India, Feb. 5, 2010.

- 38. KM Kim, M Keizer, SH Kim, YH Kim, and YK Lim, "Ethnography study to improve a children library called 'Miracle library'," Designing for Children, Mumbai, India, Feb. 3, 2010.
- 39. KM Kim, and WH Lee, "How do directional diversity and congruence in user interfaces affect usability," Proceedings of IASDR 2009, Seoul, Oct. 2009.

### **Domestic Conference**

- 1. <u>DS Kim</u>, KM Kim\*\*, "A Food Waste Disposal System for Improving User Experience and Utilizing Food Waste Resource," Proceeding of 2023 KSDS Fall International Conference DSUS, pp362-367, October 2020
- 2. <u>DH Lee</u>, KM Kim\*\*, "Differences in Emotions and Personality of Elderly Care Robots," Proceeding of 2023 KSDS Spring International Conference, pp36-37, May 2023
- 3. <u>DH Lee</u>, KM Kim\*\*, "Elderly Needs and A Design Direction of Care Robot according to Persona," Proceeding of 2022 KSDS Fall International Conference, pp138-139, November 2022
- 4. <u>KH Kim</u>, KM Kim\*\*, "A Proposal of Product Service Design to Promote User's Positive Behavior," Proceeding of 2022 KSDS Fall International Conference DSUS, pp244-245, November 2022
- 5. UJ Kwon, NT Lee, KM Kim\*, "A Study on the Body Shape of the Special Warfare Soldiers for the Design of Military Supplies," Proceeding of 2022 KSDS Fall International Conference, pp48-49, November 2022
- 6. <u>JS Kim</u>, KM Kim\*\*, "Design Considerations for Home Muscular Exercise Equipment for the Elderly," Proceeding of 2022 KSDS Fall International Conference, pp46-47, November 2022
- 7. <u>A Saduakas</u>, KM Kim "Exterior body design considerations in the development of the elderly-oriented socially assistive robot," Proceeding of 2022 KSDS Fall International Conference, pp140-141, November 2022
- 8. <u>U Ismatullaev, Bertha Garza, DH Lee</u>, KM Kim, "Exterior body design considerations in the development of the elderly-oriented socially assistive robot," Proceeding of 2022 KSDS Fall International Conference, pp158-159, November 2022
- 9. <u>JS Kim</u>, KM Kim\*\*, "Form Factor Changes During the Product Design Process The Case of Home-workout Device Design," Proceeding of 2021 KSDS Fall International Conference, pp362-363, November 2021
- 10. M Gabbas, KM Kim\*\*, "A Method for Gathering User Interface (UI) Design Requirements from 'Complex' Users: A Preliminary Case Study," Proceeding of 2020 KSDS Fall International Conference, Online, November 14, 2020
- 11. M Gabbas, KM Kim\*\*, "Introduction to a New Concept Design of an Al-based 6-axis Digital Pathology Slide Scanner," Proceeding of 2020 KSDS Spring International Conference, Online, June 13, 2020
- 12. YD Ryu, JY Yang, KM Kim\*\*, "Identification of Design Opportunities Using New Material in the Slipper Market," Proceeding of 2020 KSDS Spring International Conference, Online, June 13, 2020
- 13. <u>SJ Joo</u>, KM Kim\*\*, "Problem in redesigning software UX/UI in closed environment," Proceeding of 2019 KSDS Fall International Conference, KINTEX, November 9, 2019
- 14. <u>JH Yang, KM Kim\*\*</u>, "Commercialization Case of U.CUBE during Master's Degree Program," Proceeding of 2019 KSDS Fall International Conference, KINTEX, November 9, 2019
- 15. JH Park, KM Kim\*\*, "Opportunity Area in upper limb rehabilitation device design," Proceeding of 2019 KSDS Fall International Conference, KINTEX, November 9, 2019
- 16. M SY Kim, KM Kim\*\*, "A UI Design Case for a Software in a New Industry Domain which is unable to take User Study," Poster presentation of 2019 KSDS Fall International Conference, KINTEX, November 9, 2019
- 17. <u>HB Lee</u>, KM Kim\*\*, "The Conditions and Definition of Transformable Design," Proceeding of 2019 KSDS Fall International Conference, KINTEX, November 9, 2019
- 18. <u>Gabbas</u>, KM Kim\*\*, "Understanding 'Detail Design' Phase Using 3D CAD: A Preliminary Analysis of 'Anybaro' Project," Proceeding of 2019 KSDS Fall International Conference, KINTEX, November 9, 2019 (Best Paper Presentation)

- 19. <u>B.A. Mezra, KM Kim\*\*</u>, "Designing Filament Recycler for fused deposition Modeling 3D-Printer," Proceeding of 2019 KSDS Fall International Conference, KINTEX, November 9, 2019
- 20. <u>JH Park</u>, KM Kim\*\*, "Integrated Product Architecture Considering Industrial Design and Engineering Design factors," Proceeding of 2019 KSDS Spring International Conference, SeoulTech Univ., May 2019, pp 132-133
- 21. M Tufail, YG Moon, KM Kim\*\*, "Rehabilitation Design Program for Older People through Co-Design Activities," Proceeding of 2019 KSDS Spring International Conference, SeoulTech Univ., May 2019, pp 238 239
- 22. <u>JH Lee</u>, M Tufail, JH Hyun, JE Kim, GH Lim, KM Kim\*\*, "Evaluation of robot's main body professional maintenance," Proceeding of 2019 KSDS Spring International Conference, SeoulTech Univ., May 2019, pp 154 155
- 23. M Tufail, JE Kim, GH Lim, KM Kim\*\*, "Maintenance and diagnostics scenario design for prognostics and health management of robots in manufacturing industries," Proceeding of 2018 KSDS Fall International Conference, Dongmyung Univ., November 3, 2018
- 24. KM Kim, "Achievements and Challenges in Education of A Specialized Design-Technology Convergence Graduate School," Proceeding of 2017 KSDS Spring International Conference, November 3, 2018, pp6-7,
- 25. <u>HB Lee</u>, KM Kim\*\*, "Definition and classification of transformable design, Proceeding of 2016 KSDS Fall International Conference, Pukyung Univ., October 29, 2016, pp 126-127
- 26. GE Kim, CJ Kim H Christiaans, KM Kim, "Interactive Lamp Design Based on The Concept of Visualization of Breath For Better Experience," Proceeding of 2016 KSDS Fall International Conference, Pukyung Univ., October 29, 2016, pp 10-11
- 27. NR Moon, KM Kim\*\*, "Identification of design problems surrounding Moroccan pregnant women, Proceeding of 2016 KSDS Fall International Conference, Pukyung Univ., October 29, 2016, pp 6-7
- 28. MJ Kim, KM Kim\*\*, "'Rain Flower' design," Proceeding of 2016 KSDS Fall International Conference, Pukyung Univ., October 29, 2016, pp 124-125
- 29. <u>HB Lee</u>, KM Kim\*\*, "Flower lamp: potential of transformable design and its characteristics," Proceedings of International Design Conference 2015, KSDS, ADADA, Cumulus, Gwangju, South Korea, October 18, 2015, pp 610-613
- 30. <u>JH Lim, YK Ahn, KM Kim\*\*</u>, CJ Kim\*\*, "Client-oriented product development process: case study on tier 3 vendor manufacturing company," Proceedings of International Design Conference 2015, KSDS, ADADA, Cumulus, Gwangju, South Korea, October 17, 2015, pp 202-205
- 31. RS Kang, NR Moon, S Lee, KM Kim\*\*, CJ Kim\*\*, "A study on product concept development process using analysis of user lifestyle and preferred product," Proceedings of International Design Conference 2015, KSDS, ADADA, Cumulus, Gwangju, South Korea, October 17, 2015, pp80-81
- 32. <u>YI Seo</u>, KM Kim\*\*, "Comparison the sensitiveness OF design elements BETWEEN industrial design AND engineering students," Proceeding of 2014 KSDS Fall Conference, UNIST, November 1, 2014, pp 42-43
- 33. <u>HB Lee</u>, KM Kim\*\*, "Introduction of integrated design and design engineering process for recliner," Proceeding of 2014 KSDS Fall Conference, UNIST, November 1, 2014, pp 56-57
- 34. <u>HJ Jang</u>, KM Kim\*\*, "Conflicts difference between designers and engineers," Proceeding of 2014 KSDS Fall Conference, UNIST, November 1 2014, pp 38-39
- 35. <u>YJ Seo</u>, KM Kim\*\*, "Comparison on the style of verbal description between industrial design and engineering students," Proceeding of 2014 KSDS Spring Conference, Incheon Univ., May 24, 2014, pp 200-201
- 36. <u>HB Lee</u>, KM Kim\*\*, "Similarity of problem recognition between industrial and engineering design students," Proceeding of 2014 KSDS Spring Conference, Incheon Univ., May 24, 2014, pp 104-105
- 37. <u>EJ Kim</u>, KM Kim\*\*, "Understanding the cognitive process A protocol study," 2013 One Conference Seoul 2013, Asia Digital Art & Design Association, Society of Design Convergence and Korean Society of Design Science, Proceeding of 2013 international convergence design conference, Hongik Univ., December 14, 2013, pp 318-321

- 38. YH Kim, KM Kim\*\*, "Design constraints adopted by designers for concept design," 2013 One Conference Seoul 2013, Asia Digital Art & Design Association, Society of Design Convergence and Korean Society of Design Science, Proceeding of 2013 international convergence design conference, Hongik Univ., December 14, 2013, pp 304-305
- 39. KM Kim, "Industrial and engineering design-integrated CAD education," 2013 One Conference Seoul 2013, Asia Digital Art & Design Association, Society of Design Convergence and Korean Society of Design Science, Proceeding of 2013 international convergence design conference, Hongik Univ., December 14, 2013, pp 310-313
- 40. KM Kim, "An integrated product design approach to the development of a solar turtle ship," Proceedings of KSDS 2013 spring conference, Seoul National Univ. of Science and Technology, May 25, 2013, pp 136-137
- 41. MR Kim, KM Kim\*\*, "How design and engineering background student perceive design problems differently?" Proceedings of 2013 KSDS Spring Conference, Seoul National Univ. of Science and Technology, May 25, 2013, pp. 132-133
- 42. EJ Kim, KM KIm\*\*, "Why more experience is important?: how experiences are utilized in the idea generation," Proceedings of 2013 KSDS Spring Conference, Seoul National Univ. of Science and Technology, May 25 2013, pp 124-125
- 43. JH Pyo, SH Pyo, J Kim, M Kim, S Rio, KM Kim\*\*, "User experience of bicycle riders in Ulsan Grand Park: Implication for the E-bike system development," 2013 ESK Spring Conference, UNIST, May 23, 2013
- 44. DK Kim, H Ha, D Lee, M Adusei, H Han, KM Kim\*\*, "Usability analysis of electric bicycle," 2013 ESK Spring conference, UNIST, May 23, 2013
- 45. SG Lee, MS Shin, WH Lim, HJ Jang, KM Kim\*\*, "E-bike service system design for vitalizing e-bike business through PEST analysis," 2013 ESK Spring conference, UNIST, May 23, 2013
- 46. R Ayubhkon, KM Kim\*\*, S Xiong, "Graphical representations of sustainable development: a literature review, Proceedings of 2012 KSDS Fall Conference, Ewha Univ. International campus, October 27, 2012, pp 52-53
- 47. EJ Kim, KM Kim\*\*, "International and domestic design research trend focusing on researchers and topics," Proceedings of 2012 KSDS Spring Conference, Yonsei International Campus, May 19, 2012, pp 40-43
- 48. MR Kim, KM Kim\*\*, "consideration in selecting design research methods for children," Proceedings of 2012 KSDS spring conference, Yonsei International Campus, May 19, 2012, pp 130-131
- 49. "R Ayubhkon, KM Kim\*\*, "Exploring ergonomic lens to sustainable design: a literature review," ESK 2012 Spring conference / The 14<sup>th</sup> Korean-Japan symposium, Jeju Sila hotel, May 26, 2012
- 50. R Ayubhkon, KM Kim\*\*, "Concept design of a smart helmet providing high visibility and interactivity," Proceeding of Korea HCI 2012 Conference, Pyeongchang, January 12, 2012, pp 820-823
- 51. KM Kim, "Understanding product design process as it fits into the interaction between industrial design and engineering design," Proceedings of 2011 KSDS Fall Conference, Sangmyong Univ., October 8, 2011, pp 110-111
- 52. R Ayubhkon, KM Kim\*\*, "Sustainable design: 20 years of growth and emerging issues a literature review," Proceedings of 2011 KSDS fall conference, Sangmyung Univ., October 8, 2011, pp 32-35
- 53. KM Kim, "New design business opportunities enabled by multidisciplinary design education," Proceeding of 2010 design combined international conference, Yonsei Wonju campus, October 23 2010, pp 134-137 (Time cited=2)
- 54. KM Kim, and KP Lee\*, "A product classification model for industrial designers in the product development process," Proceedings of KSDS 2009, May 2009.
- 55. KM Kim, and KP Lee\*, "Design process through manipulation of product-form influential factors of PCB layout," Proceedings of KSDS 2009, May 2008.

### **BOOK CHAPTER**

R Ayubhkon, S Xiong, **KM Kim\*\*** "New perspectives towards ergonomics in sustainable development," in the book: Sustainable Development: Processes, Challenges and Prospects, 1<sup>st</sup> Edition, Chapter 6, Nova Publishers, Editors: Deborah Reyes, pp.143-168

### **EXTERNAL RESEARCH FUNDING** (\$1 = ₩1,300)

- 1. 10/2022 − 12/2025, PI (100%), ₩130,000,000, "Combat sleeping bag," Korea Research Institute for Defense Technology Planning and Advancement
- 2. 12/2021 − 10/2024, PI (100%), ₩150,000,000, "Combat backpack," Korea Research Institute for Defense Technology Planning and Advancement
- 3. 04/2021 − 12/2025, PI (100%), ₩5,850,000,000, "Commercialization design and development of Intelligent Product-Service System for personalized full silver life cycle care," Korea Evaluation Institute of Industrial Technology
- 04/2021 12/2021, Co-PI (40%), ₩184,000,000 (₩73,600,000 allocated to KM Kim), "Development of Local Proximity Air-Conditioning Technology to Reduce Cooling and Heating Power Consumption of Self-driving Electric Vehicles and Improve Thermal Comfort of Individual Passengers," Korea Evaluation Institute of Industrial Technology
- 5. 03/2020 − 02/2025, Co-PI (10%), ₩2,446,463,000 (₩244,600,000 allocated to KM Kim), "New technology convergence design specialist training project," Korea Institute for the Advancement of Technology
- 6. 03/2020 − 12/2021, PI (100%), ₩92,820,000, "Al-based ultra-resolution digital pathology scanner system," National IT Industry Promotion Agency
- 7. 09/2019 − 12/2019, PI (100%), ₩8,363,637, "Digital Torque Wrench design," Automotion Corp. / Ulsan Chamber of Commerce & Industry
- 8. 10/2018 − 06/2019, PI (100%), ₩29,747,000, "Development of motorized body balance improvement device and exercise program based on sensor measurement database," Ministry of SMEs and Startups
- 9. 09/2018 − 12/2019, PI (100%), ₩9,818,180, "Smart helmet development based on wireless brain wave," HHS Corp. / Ulsan Chamber of Commerce & Industry
- 10. 04/2018 − 12/2019, PI (100%), ₩100,000,000, "By securing industrial MR technology, providing smart diagnostic information of the robot development of HMD-based collaboration system," National IT Industry Promotion Agency
- 11. 04/2017 − 12/2018, Co-PI (30%), ₩41,514,000 (₩12,454,200 allocated to KM Kim) "Development of ADL ability improving linger stand (IV pole) considering the care environment of child patient and care efficiency of caregiver and medical staff," Korea Evaluation Institute of Industrial Technology
- 12. 04/2017 − 08/2017, PI (100%), ₩9,818,180 "Design development of an exercise device to prevent scoliosis," The Balance Korea Corp. / The Ulsan Chamber of Commerce & Industry
- 13. 03/2017 − 12/2017, Co-PI (15%), ₩830,000,000 (₩124,500,000 allocated to KM Kim), "Design convergence venture project," Korea Institute of Design Promotion
- 14. 04/2016 − 09/2016, PI (100%), ₩9,000,000, "Design development of radiation shielding garment," DongWon ENTec Co., Ltd. / The Ulsan Chamber of Commerce & Industry
- 15. 05/2015 04/2017, PI (100%), ₩78,600,000, "The difference in cognitive process between industrial designers and engineering designers in design problem-solving process," National Research Foundation of Korea
- 16. 05/2015 − 09/2015, PI (100%), ₩9,000,000, "Baby carrier design development," Bomyeong Spotech /The Ulsan Chamber of Commerce & Industry
- 17. 10/2014 − 02/2020, PI (100%), ₩3,352,134,000, "Creative, innovative & high-skilled design workforce training project (Graduate School of Creative Design Engineering)," Korea Institute for the Advancement of Technology
- 18. 06/2014 − 09/2014, PI (100%), ₩9,000,000, "Recliner design development," Samil Flex/The Ulsan Chamber of Commerce & Industry
- 19. 04/2014 − 09/2014, Co-PI (10%), ₩25,000,000 (₩2,500,000 allocated to KM Kim), "Integrated smart toy system planning and design," Korea Institute of Science and Technology
- 20. 01/2013 − 03/2013, Co-PI (10%), ₩7,000,000, "Research group for zero-energy based on the convergence of

- renewable energy and mobility," Korea Evaluation Institute of Industrial Technology
- 21. 08/2012 − 12/2012, Co-PI (80%), ₩200,000,000 (₩160,000,000 allocated to KM Kim), "Master planning GREEN ULSAN City and hosting solar cell boat competition, Korea Institute of Energy Research
- 22. 05/2012 − 04/2015, PI (100%), ₩78,573,000, "Understanding product design process where industrial designers and engineering designers contribute as product designers and developing their interaction model," National Research Foundation of Korea
- 23. 04/2012 − 07/2012, PI (100), ₩27,000,000, "Design of brand slogan and character for Ulsan Junggu," Junggu Ulsan Metropolitan City
- 24. 01/2012 − 10/2012, Co-PI (2%), ₩500,000,000 (₩10,000,000 allocated to KM Kim), "Next generation of solar cell product design," Korea Institute of Energy Research
- 25. 05/2011 − 04/2012, Co-PI (10%), ₩270,000,000 (₩27,000,000 allocated to KM Kim), "International collaboration Support Project for Green Car," Leading Industry Support Group of Southeast Regional Economic Region
- 26. 04/2011 − 12/2011, Co-PI (2%), ₩500,000,000 (₩10,000,000 allocated to KM Kim), "Next generation of solar cell product design," Korea Institute of Energy Research
- 27. 11/2010 − 10/2011, Co-PI (25%), ₩80,000,000 (₩20,000,000 allocated to KM Kim), "Development of an innovative curriculum enabling two-track selection in design/engineering education," National Research Foundation of Korea
- 28. 05/2010 − 04/2011, Co-PI (8%), ₩250,000,000 (₩20,000,000 allocated to KM Kim), "International collaboration support project for green car," Leading Industry Support Group of Southeast Regional Economic Region

### INDUSTRY PROJECTS (\$1 = \$41,300)

- 1. 12/2023 10/2024, Co-PI (20%), ₩70,000,000, "Developing sensor modules to monitor upper body angle and speed, and creative work development," LG Electronics
- 2. 09/2023 − 03/2024, PI, ₩70,000,000, "Development of a kit to improve accessibility for installing food waste disposers and to check installation feasibility," LG Electronics
- 3. 03/2021 − 03/2022, Co-PI (22%), ₩70,000,000 (₩15,400,000 allocated to KM Kim), "Design and prototype of Robot Mattress cleaner," LG Electronics
- 4. 04/2021 − 03/2022, Co-PI (22%), ₩76,500,000 (₩16,830,000 allocated to KM Kim), "Concept design of smart heating and cooling devices to provide leisure experience in future mobility space," Hyundai NGV
- 5. 03/2021 − 09/2021, Co-PI (40%), ₩50,000,000 (₩20,000,000 allocated to KM Kim), "Deriving new UX/UI concept and design for washing machine/dryers for MZ generation," LG Electronics
- 6. 04/2020 − 12/2020, PI (100%), ₩40,000,000 "Development of attractive and easy-to-use slippers using new materials," Yongjin Chemical Ltd.
- 7. 04/2020 − 12/2020, PI (100%), ₩40,000,000 "Development of clothing folding mechanism for home use," LG Electronics
- 8. 06/2019 − 08/2020, Co-PI (50%), ₩30,000,000 (₩15,000,000 allocated to KM Kim), "Development of an ergonomic, smart safety helmet that is easy to use and detects workers' brain signals and sends them wireless," HHS Inc.
- 9. 04/2019 − 01/2020, Co-PI (30%), ₩40,000,000 (₩12,000,000 allocated to KM Kim), "Development of recycling machine," Superbin Inc.
- 10. 03/2018 09/2018, PI (100%), ₩50,000,000, "Synchronized home appliance design development," LG Electronics.
- 11. 10/2017 − 12/2019, PI (100%), ₩18,000,000 "Development of IOT-based motorized physical exercise device for maintaining body balance and preventing diseases caused by spinal imbalance," The Balance Korea
- 12. 09/2017 10/2017, PI (100%), ₩10,000,000 "User test of Web OS TV 3.5 version," LG Electronics
- 13. 07/2017 − 11/2017, PI (100%), ₩9,500,000 "Design development of smart drone," RGB research
- 14. 02/2016 − 11/2016, Co-PI (20%), ₩95,000,000 (₩19,000,000 allocated to KM Kim), "Object appliance set − pilot production," LG Electronics
- 15. 10/2014 − 09/2015, Co-PI (20%), ₩97,000,000 (₩19,400,000 allocated to KM Kim), "Y+5 concept generation of future product," LG Electronics

- 16. 03/2013 − 12/2013, PI (100%), ₩27,000,000, "Electric bike system design and the development of its service model," SG Enersys ltd.
- 17. 10/2012 01/2013, PI (100%), 430,000,000, "Design and design engineering for a black box," ATM Corp.

## **Design Development**

1.	2012-2024,	Combat backpack, NH Corp. & Defense Agency for Technology and Quality
2.	2022-2023,	UMAY: Data-base Dysphagia rehabilitation training device, UNIST Smart Healthcare center
3.	2020-2021,	UMAY-Gamified UI Design for Dysphagia therapy
4.	2020,	A module that holds EEG electrodes for brainwave measurement
5.	2019,	A rehabilitation device for dysphagia training, Reno-Device
6.	2019-2020,	GOOPI- Data-driven elbow joint rehabilitation training device
7.	2019-2020,	Wave.Hat: smart saft hat, HHS
8.	2018-2020,	UCUBE (educational toy), UNIST & ID Space Corp.
9.	2019,	Digital Torque Wrench, Automotion Corp.
10.	2018,	Wireless EEG-based smart helmet, HHS Corp.
11.	2017-2018,	Anybaro-ICT (exercise and body balancing device), The Balance Corp.
12.	2017-2018,	Anybaro-S (exercise and body balancing device), The Balance Corp.
13.	2016-2017,	Toguz Korgool (game toy), UNIST
14.	2016,	Personal Aerial Vehicle, UNIST future mobility research center
15.	2016-2017,	SONORE, Global Care
16.	2016,	Radiation shielding suit, Dongwon Entech Corp.
17.	2015,	Multi-functional baby carrier for infants, Bomyung Spotech Corp.
18.	2014,	Recliner, Samil Reflex Corp.
19.	2012,	Solar-powered turtle shop, UNIST & Korea Institute of Energy Research
20.	2012,	CI and symbol design, Ulsan Jungku
21.	2012-2013,	Black box, ATM Corp.
22.	2011-2012,	WinkMagic, Hibraid Inc.
23.	2008,	Solar power generation parasol and charging device
24.	2008,	Self-propelled photovoltaic water circulator, KAIST
25.	2007,	Wellbeing Capsule, SpringTime Corp.
26.	2007,	01M7-Turbo SASO, 01M Corp.
27.	2006-2007,	Soccer robot for games, IR Robot Corp.
28.	2006	GIS UMID, Taekwang Enc Corp.
29.	2006,	UBPK- Fire Detector, Taekwang Enc Corp.
30.	2001-2006,	High-efficiency electric power generation motor system, Hanmaum Energy Science Institute Corp.
31.	2000,	1-tonTruck Double Cabbin, Samsung Heavy Industries Corp.
32.	1999-2000,	Rice transplanter, LG Machinery Corp.
33.	1999,	1-ton Truck Rear Protector, Samsung Commercial Vehicle Corp.
34.	1998-1999,	Engine-type Forklift Truck, Samsung Heavy Industries Corp.
35.	1997-1998,	50-ton Truck Crane, Samsung Heavy Industries Corp.
36.	1996-1997,	Middle class Excavator, Samsung Heavy Industries Corp.
37.	1995,	Large Wheel Loader, Samsung Heavy Industries Corp.
38.	1994-1995,	Middle class Wheel Loader, Samsung Heavy Industries Corp.

### **TECHNOLOGY TRANSFER**

- 1. Ninano Company Corp., 'Prefabricated mat block for interlayer noise shielding: Design,' 2019
- 2. The Balance Korea Corp., 'Anybaro related patents and related technologies developed,' 2019
- 3. ID Space Corp., 'Three patents related to Maze Cube, board game and Geneva clock,' 2019
- 4. Quad-U Corp., 'Wink-magic related patents,' 2018
- 5. HiBraid Corp., 'Wink-magic related patents,' 2015

### INDUSTRY CONSULTING

- 1. "Development of recycling waste separation device," Superbin Inc. ₩11,000,000, 06/01/2020 05/31/2021
- 2. "Baby product design and development," Ninano Company Corp. ₩13,750,000, 12/14/2017 06/13/2018
- 3. "Innovative design process that integrates design and engineering," CAMTIC Advanced Mechatronics Technology Institute, ₩990,000, 02/01/2017 - 02/15/2017
- 4. "New product development process and method training using EPP molding materials," Dongsin Industry, 2014

### **COMMERCIALIZATION**

- 1. 'U.CUBE' commercialized by ID SPACE Corp. August 2019. (UCUBE: 2017 Reddot & SPARK Design Award Winner). Wadiz Crowdfunding: ₩47,257,000 in January 2021. Makuake Japan Crowdfunding: ¥2,688,280 (₩ 28,550,000) in April 2021. Released in the domestic market on April 28, 2021
- 2. 'Anybaro' commercialized by The Balance Korea Corp. November 2019. (Anybaro: 2018 SPARK Design Award Winner). The total sales exceeded ₩100,000,000 in 2019.
- 3. Car Black box 'GB-100' commercialized by ATM Corp. The total sales exceeded ₩440,000,000 in December 2015. Related industry project: 10/2012 – 01/2013, PI (100%), ₩30,000,000, "Design and design engineering for black box," ATM Corp., Related Design registration: 30-0706624, 30-0706605, 30-0724021, 30-0724020

### **ENTERPRENEURSHIP**

• Founded 'ID Space Corp.' as a UNIST faculty start-up company in 2019.

### INTERACTURAL PROPERTY

### Patent – registered in Korean Patent Office

- 1. Holder for smart, 1025030620000, 02/20/2023, # of inventors: 2
- 2. EEG-based smart safety helmet, 1025546360000, 07/07/2023, # of inventors: 2
- 3. Upper Limb Rehabilitation Training Device, 1025368910000, 05/22/2023, # of inventors: 2
- 4. Segregated Collection Apparatus of Recycled Product, 1023496600000, 01/06/2022, # of inventors: 5
- 5. Recycling device for flat storage, 10-2263960, 06/07/2021, # of inventors: 6
- 6. Toys with magnetic substance, 10-2156571, 09/10/2020, # of inventors: 3
- 7. A sliding refrigerator monitoring food and control method thereof, 10-2154041, 09/03/2020, # of inventors: 2
- 8. Control Method of Sliding Door Refrigerator, 10-2165257, 10/06/2020, # of inventors: 2

- 9. Sliding Door Refrigerator, 10-2165256, 10/06/2020, # of inventors: 2
- 10. Pen with rotary pointer, 10-2122770, 06/09/2020, # of inventors: 3
- 11. Board of board game, 10-2172443, 10/26/2020, # of inventors: 2
- 12. Assistive device for exercise and rehabilitation, 10-1975220, 04/29/2019, # of inventors: 2
- 13. Watches using Geneva gear, 10-2033090, 10/10/2019, # of inventors: 4
- 14. Case for mobile phone, 10-1952387, 02/20/2019, # of inventors: 6
- 15. Maze-type cube block, 10-2062307, 12/27/2019, # of inventors: 3
- 16. Hydraulic equipment monitoring system, 10-1837705, 03/08/2018, # of inventors: 6
- 17. Educational electric circuit sticker, 10-1886800, 01/05/2017, # of inventors: 4
- 18. Message delivery apparatus, 10-1894014, 01/13/2017, # of inventors: 4
- 19. Laser guide apparatus and method for measuring distance and degree using the same, 10-1871958, 06/21/2018, # of inventors: 4
- 20. Multi-functional baby carrier, 10-1790557, 10/20/2017, # of inventors: 5
- 21. Smart Diffuser, 10-1861344, 05/18/2018, # of inventors: 6
- 22. Humidifiers and water supply, 10-1695302, 01/05/2017, # of inventors: 8
- 23. Information providing method for three-dimensional whale puzzle, 10-1561695, 10/13/2015, # of inventors: 6
- 24. Dumbbells with speaker, 10-1574478, 11/28/2015, # of inventors: 6
- 25. Grill for roasting meat, 10-1561694, 10/13/2015, # of inventors: 5
- 26. A schedule completion method based on use history of smartphone, 10-1615938, 04/21/2016, # of inventors: 7
- 27. Direction guiding jacket for vehicle, 10-1574479, 11/28/2015, # of inventors: 6
- 28. Posture recognition device utilizing smart phone, 10-1580317, 12/18/2015, # of inventors: 6
- 29. Massage apparatus, 10-1431819, 8/12/2014, # of inventors: 4
- 30. Structure of door handlebar, 10-1374882, 3/10/2014, # of inventors: 4
- 31. Self-adhesive board, 10-1248656, 3/22/2013, # of inventors: 1
- 32. Self-adhesive board, 10-1248735, 3/222013, # of inventors: 1
- 33. Attaching device for extension eyelashes, 10-1323076, # of inventors: 2
- 34. Body weight scale, 10-1329912, 11/8/2013, # of inventors: 4
- 35. Alarm device reflecting driving characteristics of the driver for a vehicle, 10-1366344, # of inventors: 1
- 36. A directional guiding device for a touring car, 10-1503525, 03/11/2015, # of inventors: 6
- 37. Braille input device for smart phone, 10-1491039, 02/02/2015, # of inventors: 6

### Design - registered

- 1. Home exercise device, 3011878680000, 10/21/2022, # of designers: 2
- 2. Hard hat sterilizer, 3011517640000, 02/15/2022, # of designers: 2
- 3. Upper Limb rehabilitation training device, 3011420440000, 12/09/2021, # of designers: 2
- 4. Safety helmet, 30-1114997, 6/15/2021, # of designers: 4
- 5. Physical exercise device, 30-1016416, 7/19/2019, # of designers: 4
- 6. Board game plate, 30-1014785, 7/8/2019, # of designers: 2
- 7. Physical exercise device, 30-1009095, 5/30/2019, # of designers: 3
- 8. Smart safety helmet, 30-1000000, 3/21/2019, # of designers: 3
- 9. Footplate for assisting physical exercise, 30-0977362, 10/15/2018, # of designers: 2
- 10. Prefabricated mat block for interlayer noise shielding 3, 30-0972169, 9/4/2018, # of designers: 2
- 11. Prefabricated mat block for interlayer noise shielding 2, 30-0972168, 9/4/2018, # of designers: 2
- 12. Prefabricated mat block for interlayer noise shielding 1, 30-0972167, 9/4/2018, # of designers: 2

- 13. Device for correcting scoliosis, 30-0956307, 5/8/2018, # of designers: 8
- 14. Speaker for reading, 30-0923145, 9/8/2017, # of designers: 3
- 15. Radiation protective garment-shirt, 30-0903040, 4/11,2017, # of designers: 5
- 16. Baby carrier, 30-0872121, 9/6/2016, # of designers: 5
- 17. Temperature and humidity detector for the smart home network, 30-0869564, 8/19/2016, # of designers: 6
- 18. Humidifier with water supplying mechanism, 30-0868527, 8/11/2016, # of designers: 8
- 19. An armchair, 30-0827979, 11/26/2015, # of designers: 4
- 20. Reclining armchair, 30-0818111, 9/25/2015, # of designers: 4
- 21. Skeleton type reclining chair, 30-0799693, 6/2/2015, # of designers: 4
- 22. Car-integrated Black box design 2-partial design, 30-0724022, 1/2/2014, # of designers: 4
- 23. Car-integrated Black box design 5-partial design, 30-0724021, 1/2/2014, # of designers: 4
- 24. Car-integrated Black box design 6-partial design, 30-0724020, 1/2/2014, # of designers: 4
- 25. Car-integrated Black box design 3-partial design, 30-0706624, 8/21/2013, # of designers: 4
- 26. Car-integrated Black box design 1, 30-0706622, 8/21/2013, # of designers: 4
- 27. Car-integrated Black box design 4-partial design, 30-0706605, 8/21/2013, # of designers: 4

### **INVITED WORKSHOP**

- 1. Operated by Ulsan Metropolitan Office of Education in collaboration with the local community (UNIST), the Humanities Classroom for Students focuses on "Empathy between Science, Technology, and Humanities - Warm Technology Changing the World." Targeted at middle and high school students in Ulsan, 10/21-28, 2023
- 2. Run four times of workshops with lectures at Humanities class for Ulsan middle school and high school students. Host: Ulsan Metropolitan Office f Education, 09/17 - 09/24/2022
- 3. Conducted a design workshop for designers and engineers. Title: User Research Method-CPSI Method. Host: CAMTIC Advanced Mechatronics Technology Institute for Commercialization, 05/26/2022
- 4. Conducted a design workshop for designers and engineers. Title: Design Thinking & Human-centered Design. Host: CAMTIC Advanced Mechatronics Technology Institute for Commercialization, 02/10/2022
- 5. Conducted Design Thinking Workshop for businessmen. Title: Design Thinking. Host: UNIST Advanced Management Program, 05/12/2019
- 6. Conducted a design workshop for designers and engineers. Title: Integration of design and Engineering innovation design process. Host: CAMTIC Advanced Mechatronics Technology Institute for Commercialization, 02/01/2017
- 7. Conducted a design workshop for engineers. Title: Training of new product development process and methods with EPP forming material, Host: DongSin Industry Corp, 11/27/2014 - 12/04/2014
- 8. Conducted a design workshop for university students. Title: Play with design Play design for new generation. Program: 2014 Humanities Festival, Host: UNIST Gifted Education Center, 07/23/2013 – 07/25/2013
- 9. Conducted a design workshop for university students. Title: Design for better campus life. Program: 2013 Humanities Festival, Host: UNIST Gifted Education Center, 07/16/2013 - 07/19/2013
- 10. Organized and ran a future camp for high school students. Title: my future reset with role models. Program: Winter School for High School Students. Host: Busan Metropolitan City Office of Education, 01/05/2013 – 01/20/2013
- 11. Conducted a design workshop for university students. Title: For better UNIST. Program: 2012 Humanities Festival, Host: UNIST Gifted Education Center, 07/12/2012 - 07/14/2012

### INVITED LECTURES, PRESENTATIONS AND PANEL DISCUSSIONS

### International

11/05/2015

06/03/2023

107/04/2023 Invited speaker, Royal College of Art. Delivered a lecture to graduate students of Design Product Program. Topic: 'Integrated Design'
 103/10/2023 Invited speaker, School of Design, The Hong Polytechnic University. Delivered a lecture to graduate students of 'Smart Service Design' course Kong. Topic: 'Elderly care robot-service system'
 108/02/2018 Invited speaker, Global Design Workshop at Shibaura Institute of Technology, Tokyo Japan, 'Future of Industrial Design'
 12/06/2017 Invited Speaker, China International Industrial Design Summit Forum, Shenzhen China, 'The role of Industrial Design in 4th Industrial Revolution'
 103/16/2017 Invited speaker, Global Engineering & Design Meeting at 90<sup>th</sup> anniversary in Shibaura Institute of Technology, Tokyo Japan, 'Design Knowledge & Education,' Tokyo Japan

Invited panelist, 'Design research & Practice' plenary session at IASDR 2015, Brisbane Australia

Seminar to IP-star enterprises, Gyeongnam, 'Human-centered design that changes the world'

### Domestic – Government organizations or public institutions

- 12/08/2022 Consumer Goods Design Trend Seminar, Daegu Gyeongbuk Design Promotion Center 'New product development through integrating design and technology' 09/02/2022 Design-led manufacturing innovation seminar, DK Works Changwon Center, Changwon. 'Product design and new product development 10/07/2021 Ulsan Senior Center, 'Understanding the Media and Interaction of the Future Society' 09/08/2021 DK Works Academy in DK Works Changwon Center, Changwon, 'Design R&D and Innovation of Manufacturing Industry' 04/21/2021 National Rehabilitation Center, Online, 'Rehabilitation Device Development from Human-centered Design Perspective' 04/07/2021 2021 Ulsan Youth Startup Academy, Ulsan, 'Product Design, Development and Startup' 07/31/2020 Seminar on Human Factor-Centered Intelligence Initiative to drive the 2020 digital new deal, hosted by Korea Institute of Design Promotion, Yangsan Future Design Convergence Center, Yangsan, 'Convergence of Design and Technology' 07/08/2020 2020 Ulsan Youth Startup Academy, Ulsan, 'Product Design and Development'
- 12/19/2019 Invited as Best practice of Industrial Special Training Project by Korea Institute for Advancement of Technology, The Westin Josun Busan, 'Student design is born as a product'
- 09/08/2019 Seminar requested by Congressman Kang Gil-boo of Ulju County. Target audience: Congressman Kang Gil-boo, secretaries, and students. Topic: 'New Product Development: The Start of Manufacturing Innovation'
- 03/28/2019 Workshop serious: re-discovery of Changwon, Changwon Research Institute, Changwon, 'New product development beginning of manufacturing innovation'
- 11/19/2018 2018 workshop on local intellectual property cooperation by Ulsan Chamber of Commerce and Industry, Ulsan, '4th industrial revolution and the future of industrial design'
- 11/01/2018 Meeting for advancing manufacturing industry organized by Ministry of Trade, Industry and Energy, Seoul, 'Advancing strategy of manufacturing industry'
- 05/16/2018. Design education for local design industry development by Kyungbuk Design Center, Daegu, 'Fusion of design and technology'
- 01/20/2017 Meeting of the 4th industrial revolution-design/life industry research group hosted by Vice Minister of Ministry of Trade, Industry and Energy at Korea Institute of Design Promotion, Seoul, 'The role of Industrial Design and 4th Industrial Revolution'
- 10/13/2016 2016 Ulsan intellectual property forum by Ulsan Regional Intellectual Property Center, Ulsan, 'Reforming

	Kwaniviyung Kim
	Ulsan Industrial Structure by Design'
09/08/2015	Lecture for Ulsan Techno-park's Management of Technology program, Ulsan Korea, 'Business Innovation through Design Convergence'
07/23/2015	Design-led fusion R&D workshop by aSSIT Graduate Institute of Management, Yangsan Korea, 'Business Innovation through Design Convergence'
03/13/2015	Opening speech of Yangsan Future Convergence Design Center, Yangsan Korea, 'The direction of Design Convergence'
11/20/2014	Invited panelist, KIDP Design Convergence Forum, Seoul Korea, (Other panelists included Tom Kelly from IDEO and Brandon Gien, the ICSID president)
12/20/2012	Knowledge Economy R&D Strategy Planning Team, Mistry of Trade, Industry and Energy, Seoul Korea, 'Fostering for small SMEs through combining design and engineering'
01/06/2012.	Korea Packaging Center in Korean Institute of Industrial Technology, Bucheon Korea, 'Integration of design and engineering for innovative product development'
Domestic – (	Companies
07/03/2024	Invited seminar to LG Electronics, Audience: LG researchers (designers and engineers), Topic: 'Intelligent companion robot design and development'
10/24/2023	Invited lecture at the Gyeongnam Venture Enterprise Association's '2023 Entrepreneurship Network Forum and Gyeongnam Venture Entrepreneurs' Day Event'. Audience: Entrepreneurs in Gyeongnam region. Topic: 'Human-Centered Design and Corporate Competitiveness'
06/24/2023	Collaboration with the Citizens' Focus, organized by the Inter-Korean Disability Treatment Support Council. Seminar on the present and future of rehabilitation in Korea in 2023. Target audience: Experts in the related fields. Topic: 'GOOPI: Data-Driven Intelligent Remote Rehabilitation Device'
09/21/2022	NH Corporation's 2022 NH Autumn Seminar. Audience: NH Corporation employees. Topic: 'Product Design and New Product Development'
11/28/2016	Enterprise members' meeting of Korea Technology Finance Corporation, Ulsan Korea, 'Reforming Ulsan Industrial Structure by Design'
08/12/2016	LG Electronics' product planning committee lecture, Seoul Korea, 'Integrated Design'
10/24/2014	SolidWorks innovation day 2015 of Dassault SolidWorks Company, Busan Westin Chosun Hotel Korea 'Design, leading the business'
02/02/2012	LG Display, Pocheon Korea, 'Human-centered design based on technology'
10/11/2011.	<u>Keynote speech</u> , SolidWorks Innovation Forum 2011, Dassault SolidWorks Korea, Changwon Korea, 'New Paradigm in 21st Manufacturing Industry; Design+Engineering'
10/06/2011	Keynote speech, SolidWorks Innovation Forum 2011, Dassault SolidWorks Korea, Seoul Korea, 'New Paradigm in 21st Manufacturing Industry; Design+Engineering'
Domestic –	Universities and academic communities
03/16/2023	Invited lecture at Postech, Pohang Korea, 'Human-centered design that changes the world'
05/21/2022	Invited speaker at Special Session 'Community Care Design,' 2022 KSDS International Design Conference, Sookmyung Women's University. Topic: 'Rehabilitation and Design – GOOPI design case'
11/26/2019	Teaching method workshop of SungShin Women's University, Seoul Korea, 'Capstone Design Course: design and teaching strategies,' audience: professors
11/09/2019	Moderator of a panel discussion at Design Korea & KSDS International Design Conference, KINTEX Ilsan Korea. Topic: 'Miss-match of design education and industry'
05 /20 /2040	

Special lecture at Industrial Design Department of Dong-A University, Busan Korea, 'Qualitative Research

12/19/2018 Teaching method workshop of Kumoh National Institute of Technology, Kumi Korea, 'Capstone Design

Method and Cases,' audience: PhD Students

05/29/2019

	Twaniviyang Kim
	Course: design and teaching strategies,' audience: professors
10/16/2018	Capstone design teaching workshop of Kyunggi university, Suwon, 'Capstone Design Course: design and teaching strategies,' audience: professors
06/08/2018	Special lecture at AMP course of UNIST Graduate School of Technology & Innovation Management Ulsan, 'Design and Business Innovation'
06/03/2018	KSDS Spring International Conference, Special session 'Challenges and Alternatives of graduate school design education,' SungShin University, Seoul, 'UNIST Graduate School Design Education'
12/14/2017	2017 Design Innovation & Entrepreneurship Forum at Dongse University, Busan, 'FusionSpace: a new approach to practical academic activity'
08/28/2017	Teaching method workshop by Busan National University, Busan, 'Capstone Design Course: design and teaching strategies,' audience: professors
06/03/2017	2017 KSDS International Spring Conference, SungShin University, Seoul, 'Design-Technology convergence graduate school: achievement and issues' Invited speech & panel discussion
05/31/2017	Special lecture at AMP course of UNIST Graduate School of Technology & Innovation Management, Ulsan, 'Design and Business Innovation'
01/06/2017	On-line contents development for teaching support, Sungshin university, Seoul, 'Capstone Design Course: design and teaching strategies'
10/29/2015	Hongik University, Department of Mechanical System Design Engineering, Seoul, 'Innovation through Design and Engineering'
04/28/2015	Graduate School of Industry at Ulsan University, Ulsan. 'Business Innovation through Design Convergence'
12/01/2014	Yoense Univ, Eco&Culture Design Institute lecture series, Wonju, 'Bridging the gap between research and practice'
11/19/2013	Techno CEO program of Ulsan University, Ulsan, 'Design for changing the world'
04/28/2011.	Dept. of Industrial Engineering of Kumoh National Institute of Technology, Kumi, 'New Paradigm in Design Education 'Design + Engineering'
Domestic –	Elementary, middle, and high schools and parents
11/10/2023	Eonyang Elementary School, Ulsan, Audience: Parents, 'Human-centered design that changes the world'
10/26/2022	Human book series: Dongcheon High School, Ulsan 'Human-centered design that changes the world'
11/04/2022	Human book series: Beonseo High School, Ulsan 'Human-centered design that changes the world'
11/02/2022	Human book series: Beonseo High School, Ulsan, 'Human-centered design that changes the world'
10/18/2021	Ulsan Women's High School, Ulsan, 'Human-centered Design and Innovative Product Development'
11/12/2020	Chungsol Elementary School, Ulsan, 'Human-centered Design and Innovative Product Development'
10/13/2020	Human book library ran at Dukwang middle school hosted by Ulsan Metropolitan Office of Education, 'Living as a Designer, Inventor, Entrepreneur and Professor'

	Living as a Designer, inventor, Entrepreneur and Professor
06/11/2018	Special guest lecture series of Gang Nam high school, Ulsan, 'Design and enterprise innovation'
05/25/2016	Special guest lecture series of Gang Nam high school, Ulsan, 'Design & Innovation'
09/27/2014	Special guest lecture series of Busan Metropolitan City Office of Education, Busan, 'Design, shaping the world'
05/09/2014	Special guest lecture series of Gang Nam high school, Ulsan, 'Life that makes my heart besting'
09/05/2012	Wednesday parent class for children career development organized by Busan Education Research & Information Center, Busan, 'Euture designers integrating science and technology through design'

Information Center, Busan, 'Future designers integrating science and technology through design' 06/162012 Small classroom in school program hosted by Busan Metropolitan City Office of Education, Busan,

'Future product designers combining science and technology through design'

06/13/2011. Special guest lecture series of Gang Nam high school, Ulsan, 'Future product designers combining science

and technology through design'

04/11/2011. Ulsan Jeil High school, Ulsan, 'Future product designers combining science and technology through design'

### MEDIA EXPOSURE (Professor Kim's achievements and activities. Over 200 times.)

- News articles about "Gyeongnam Province's Promotion of Industrial Design Education for Entrepreneurs and Youth
  ": total 3
  - Newsis, CNB News, E-News today 06/15,16, & 19/2023
- News articles about "UNIST Design department 'Design Showcase 22": total 4
  - Asia Economy, Herald Economy, Berista Alpha, Busan Dail, 11/06, 07, & 08/2022
- News articles about "Turning Ulsan into a Sky Automotive Hub Technology Development Linked between Industry and Academia on a Solid Manufacturing Foundation": total 1
  - Kyungsang Daily, 04/04/2022.
- Reports on "Professor Kim winning the Best of the Best award at the Red Dot Design Award in Germany": total 7
  - Seoul Economy, Ulsan Daily, Ulsan Jeil Daily, Financial News, Ulsan MBC, Newsis, Segye Daily, Kyungsang Daily, 09/23,24/2021
- · News articles on the "Gyeongnam Province Management Forum Held to Raise Awareness of Design": total 2
  - Gyeongnam Provincial Newspaper, Asia Today, 09/09/2021
- News articles about "UNIST winning 10 iF Design Awards": total 6
  - Maeil Economy, Donga Science, License News, Kukje News, Ulsan Daily Newspaper, 04/29/2021; Tech World News, 04/30/2021
- News articles about "Team Anybaro & Team Wave Hat awarded the Minister of Trade, Industry and Energy Award at 2020 Industry-Academic Project Challenge": total 15
  - Beta News, News way, Financial News, 11/03/2020; Hankuk Daily Newspaper, Ulsan Daily Newspaper, Asia Economy, Busan Daily Newspaper, Newsis, News Week, News1, Kukje News, 12/03/2020; Beta News, Segye Daily Newspaper, 12/04/2020; News Way, 12/06/2021; Tech World News, 12/07/2020
- News articles about "Ulsan city along with UNIST to foster urban air mobility": total 1
  - Ulsan Daily Newspaper, 07/08/2020
- News articles about "UCUBE": Total 3
  - Power Korea, 12/24/2019; Chosun Daily Newspaper, 05/06/2021; (Chosun Daily Newspaper); PR Times (Japan Media), 2/16/2021
- Reports on "President Moon present '2 millionth patent certificate, 1 millionth design certificate' today": total more than 100 media, 9/19-20/2019
- New articles about "KIDP Holds job counseling sessions and seminars for specialized high schools": total 2
  - Money Today, 11/08/2019; Financial News, 11/08/2019
- News articles and broadcasting about "UNIST Professor Honored with Millionth Certificate of Design Registration signed by President Mr. Moon": many
  - Many local media outlets carried the news at home and abroad for about a week from Sept. 19.
- Overseas press releases about "UNIST winning 2018 RedDot Award": total 2
  - EUREKALERT, 01/19/2019; LIMON.KG, 11/01/2018 (Overseas' press)
- News articles and broadcasting about "UNIST winning 2018 SPARK Design Awards": total 19
  - Hangyurae Newspaper, 12/26/2019; Maeil Daily Newspaper, 12/25/2018; Kyungsang Daily Newspaper, 12/24/2018; Financial Newspaper, 12/24/2018; Asia Economy, 12/24/2012; Busan Daily Newspaper,

12/24/2018; Ulsan MBC, 12/24/2018; YTN Science, 12/24/2018; Ulsan Jonghap Daily Newspaper, 12/24/2018; Veritas-Alpha, 12/24/2018; Yeonhap News, 12/23/2018; Ulsan Daily Newspaper, 12/23/2018; University Journal, 12/23/2018; Hello-DD, 12/23/2018; Newsweeks, 12/23/2018; E-Dailiy, 12/23/2018; News 1, 12/23/2018; Newsis, 12/23/2018; Hankuk Daily Newspaper, 12/23/2018

- News articles about "Workshop on local government's cooperation for intellectual property": total 2
  - Ulsan Jeil Daily Newspaper, 11/30/2018; Kyungsang Daily Newspaper, 11/30/2018
- News articles about "UNIST developing manned Drone at UNIST": total 5
  - Ulsan Daily Newspaper, 01/01/2017; Financial Newspaper, 01/01/2017; Ulsan Jonghap Daily Newspaper, 01/01/2017; Sinah Daily Newspaper, 01/01/2017; Financial News, 01/01/2017
- News article, "Training cradle of Industry + engineering design experts", Etnews, 12/09/2014
- News articles about "UNIST hosting international Design Conference and Design Symposium": total 2
  - Ulsan Daily Newspaper, 11/03/2014; Ulsan Jeil Daily Newspaper, 11/03/2014
- News articles about "UNIST students developed a block toy that lights without battery": total 7
  - Yunhap News, 11/23/2013; Kyungsang Daily Newspaper, 11/22/2013; Digital Tiles, 11/22/2013; Ulsan Jeil Daily Newspaper, 11/22/2013; Ulsan Newspaper, 11/22/2013; Ulsan Daily Newspaper, 11/22/2013; World Newspaper, 11/22/2013
- News articles and broadcasting about "a UNIST Uzbekistan student became a professor in his country": total 10
  - Kyungsang Daily Newspaper, 10/04/2013; Jungang Daily Newspaper (joins), 10/04/2013; Ulsan Jeil Daily Newspaper, 10/04/2013; Seoul Economy Newspaper, 10/04/2013; Maeil Economy, 10/04/2013; Yunhap News, 10/04/2013;, Ulsan Newspaper, 10/04/2013; Ulsan MBC, 10/04/2013; Ulsan Daily Newspaper, 10/04/2013; Hankook Daily Newspaper, 10/04/2013
- News articles about "a UNIST student won CAD/CAM competition": total 2
  - Ulsan Jeil Daily Newspaper, 08/20/2012; Ulsan Daily Newspaper, 08/20/2013
- News article "Need to have a consensus about respecting industrial technology", Ulsan Jeil Daily Newspaper, 01/04/2013
- News articles about "running winter school": total 2
  - Jungang Daily Newspaper, 12/09/2012, Busan Daily Newspaper, 12/05/2012
- News articles about "Hankook Delcam donated 55 billion Won worth of Software to UNIST": total 3
  - Patent News, 07/05/2011; Jungang Daily Newspaper, 05/24/2011; Ulsan Daily Newspaper, 05/24/2011
- Articles about "Professor KM Kim's vision on Green energy city": total 2
  - Ulsan Jeil Daily Newspaper, 11/13/2012; Ulsan Jeil Daily Newspaper, 11/12/2012,
- An article about interdisciplinary education of Design and Engineering, CAD&Graphics, 10/01/2012

### Professor KM Kim's Columns on Kyungsang Daily Newspaper (all in Korean)

- 1. "The method to reborn converging technologies through design", 06/12/2012
- 2. "Green industry city, Ulsan's dream", 05/11/2012
- 3. "Follow your dream, not a vision mentioned by others", 04/11/2012
- 4. "Sustainable industrial capital city and industrial material distribution complex", 03/12/2012
- 5. "The role of design school", 02/09/2012
- 6. "Experts between inside and outside of the ring", 01/06/2012

### **UNIST SERVICE ACTIVITIES – Committee, TFT**

03/2023 – 02/2025 Academic Information Center Steering Committee Member

03/2023 – 02/2025	International Cooperation Committee Member
08/2022 - 07/2023	Member of the Creative Design-Engineering Graduate School Steering Committee
03/2020 – Present	Personnel Committee Member, Department of Design
03/2022 - 02/2024	Information Steering Committee Member
07/2020 - 05/2024	LG-UNIST Working Group Chair
05/2022 – 12/2023	Vision Committee Chair, Department of Design
03/2022 - 02/2024	IT Advisory Committee Member
03/2020 – Present	Personnel Committee Member, Department of Design
08/2016 - 02/2020	Industrial Innovation Committee Member
03/2018 - 02/2020	4th Industrial Innovation Research Institute Working Committee Member,
03/2018 - 02/2019	Professor Admission Officer
03/2016 - 02/2020	Steering Committee Chair of Graduate School of Creative Design Engineering
04/2016 - 02/2018	Industrial Strategy Committee Member
12/2015 – 12/2017	Leadership Center Steering Committee Member
10/2014 - 02/2018	Personnel Committee Member, School of Design and Human Engineering
09/2014 – 10/2014	IT Advisory Committee Member
08/2012 – 12/2015	Gifted Education Council Member
03/2012 - 02/2015	Curriculum Steering Committee Member
09/2012 - 09/2014	IT Advisory Committee Member
02/2012 - 02/2013	UQI TF Team Member
11/2011 – 10/2012	UNIST Research Activation Strategy Setting Committee Member
10/2010 - 08/2013	Undergraduate Committee Chair, School of Design and Human Engineering
09/2010 - 09/2012	IT Advisory Committee Member
08/2010 – 12/2012	Book Selection Committee Member
04/2011	Played a crucial role in getting Delcam Korea & Dassault Systems SolidWorks Corp. to donate 5.5 billion won's worth (500 users) of SolidWorks (3D CAD Software) to UNIST

## **STUDENT SUPERVISION**

### PhD Students

1.	Daehun Lee	2024 – ongoing, Topic: "Robot Personality Design"
2.	Jaehun Jeong	2022 – ongoing, Topic: "UI Design for Production Process Management""
3.	U. Ismatullaev	2022 – ongoing, Topic: "Scenario-based design specification development"
4.	Haebin Lee	2016 – ongoing, Topic: "Transformable design"
5.	Tufail Muhammad	2016 – 2020, Graduated, "Design for assisting elderly with poor motor control skills and
		$managing\ their\ low-back\ pain''\ (Currently\ research\ assistant\ professor\ at\ Hong\ Kong\ Polytechnic$
		University)

### Master's Students

6.	Jeonghyun Kim	2024 – ongoing, Master-PhD combined, Topic (TBC): "Al Robot Service Platform Design"
7.	Danyal Sarfraz	2024 – ongoing, Master, Topic (TBC): "XR-based Design Process"
8.	Jungsoo Kim	2022-2024, Graduated, "Exercise Device Design for Elderly"

9.	Alisher Saduakas	2021-2023, Graduated, "The Size Study and Self-Balancing Chassis Design of a Two-Wheeled
		Socially Assistive Robot for the Elderly"
10.	Yedam Ryu	2020-2022, Graduated, "Constant Problem and Solution Space Investigation Method in User
		Study Phase: Focusing on Identifying Early Elderly's Needs and Design Solutions"
11.	Malika Gabbas	2020-2022, Chair, Graduated, "Development of a Gamified User Interface: User-centered ICT-
		Based Dysphagia Training System"
12.	Jaehan Park	2019-2021, Chair, Graduated, "The Integrated Design Process of a Rehabilitation Exercise
		System: Elbow Joint Rehabilitation Device and Service"
13.	Sangjin Joo	2019-2021, Chair, Graduated, "The Integrated Product Development Process of WAVE.Hat: EEG
		detecting Smart Hard-hat for Construction Site Workers"
14.	Jihyun Yang	2018-2020, Chair, Graduated, "Commercialization of an Academic Outcome: a Case Study of
		U.CUBE"
15.	Sangjin Park	2017-2019, Chair, Graduated, "Stool-D: a furniture type of health training device"
16.	Yungchul Chung	2017-2018, Chair, Graduated, "Breath Time: Inducing deep breath through physical volume"
17.	Myungjin Kim	2016-2017, Chair, Graduated, "The Development of a Balanced Body Exercise Platform:
		Applications in the Treatment of Low-back Pain and Spine Related Disorders"
18.	Jihyun Lim	2015-2016, Chair, Graduated, "Sticky-up"
19.	Narae Moon	2015-2016, Chair, Graduated, "SONORE: Design for improving maternal health in Morocco"
20.	Haebin Lee	2014-2015, Chair, Graduated, "Difficulties in Transformable Design and its implication"
21.	YoungJong Seo	2013-2014, Chair, Completed MSc Course, running his own company
22.	EunJin Kim	2012-2013, Chair, Graduated, "Cognitive Styles in the Creative Process"
23.	MeeRhee Kim	2011-2013, Chair, Graduated, "The Effect of Educational Background On Designers' Viewpoints
24.	Radijiyev Ayubhkor	n 2011-2012, Chair, Graduated, "The Role of Human Factors in Sustainable Design"

### Hired researchers

- 1. Eujeong Kwon: Military backpack design (April 2022 December 2022, paid researcher, Korea)
- 2. Alisher Saduakas: Two-wheel balancing mechanism development (March 2023-Feburary 2024, paid research, Kazakhstan)
- 3. Ismatullaev Ulugbek: Silver care research (September 2021– February 2021, paid researcher, Uzbekistan)
- 4. Yedam Ryu: Smart helmet design (May December 2018, paid researcher, Chungnam University, Korea)

### **International Interns**

- 1. Lap Wing Cheung: Mixed reality scenario design (summer. 2018, Hong Kong Polytechnic University, IAESTE program)
- 2. Rachit Parikh: Maze Cube path design (summer 2017, Nirma University, India)
- 3. Jiho Shin: Maze Cube path design (summer 2017, Hong Kong Polytechnic University)
- 4. Suah Han: Personal aerial vehicle design (summer 2016, Yanbian University of Science & Technology, China)
- 5. Prakash Pranay: Action-based design research (summer 2015, Indian Institute of Technology, Patna, India)
- 6. Andrey Pak: Utilization of 3D CAD in design (summer 2015, Nazarbayev University, Kazakhstan)
- 7. Kasim Nabeel Rafa: Investigating inclusive design (summer 2014, University of Michigan-Ann arbor, USA)
- 8. Grant Schroll: Campus service system design (summer 2012, University of Michigan-Ann arbor, USA)
- 9. Rami Toumi: Electric bike development (Summer 2012, Feb August 2013, National Eng. School of Tunis, Tunisia)
- 10. Quael Hajji: Electric bike development (Feb August 2013, National Eng. School of Tunis, Tunisia)

### Internal Lab. Interns - UNIST

- 1. Aburakhimov Donierbek: Upper limb rehabilitation design (fall 2021 present)
- 2. Joongsoo Kim: Urban air mobility design (fall 2020; spring, summer 2021)
- 3. Inhyeok Choi: Slipper design with assembly function (summer 2020)
- 4. Seunghyun Bang: UCUBE marketing analysis and strategy (winter 2019)
- 5. Batgerel Nyamdash: Differences of design approaches between ID students and Marketing students (Fall 2019)
- 6. Sangyoon Kim: Cooperative Robot UI design and test for Mixed Reality (Fall 2019, spring 2020)
- 7. Bouchra Amira Mezrar: EEG device control circuit design (spring 2019)
- 8. Kussainova Togzhan: Mixed Reality UI Design (spring 2019)
- 9. Sangyoon Kim: Designing marine welding robot (winter 2018)
- 10. Usachenko Velimyr: Designing table connector (fall 2018)
- 11. Jeonghoon Hyun: Sliding door-type refrigerator mechanism (summer, fall 2018)
- 12. Malika Gabbas: Engineering design, 3D modeling for production (spring 2018)
- 13. Jaehee Lee: Laser welding device design (spring, summer, fall 2018)
- 14. Junsoo Kwon: Air taxi design (winter 2017, spring 2018)
- 15. Seongryong Kim: Campervan & motorhome design (fall 2017)
- 16. Hayoung Lee: Camping car interior design (fall 2017)
- 17. Wooin Jang: Designing Geneva gear mechanism clock (winter 2015, spring 2016, spring 2017)
- 18. Juhyuk Yoon: Designing flying mechanism (summer, fall, winter 2015)
- 19. Jinhee Cha: Designing a white cane for blind people (summer, winter 2015)
- 20. Woojin Lee: Designing home appliances (spring 2015)
- 21. Jeonghoon Hyun: Designing a refrigerator with sliding doors (fall, winter 2014)
- 22. Jeunghee Pyo: Electric bike service system design (fall 2013)
- 23. Dokyung Kim: Developing action-based inquiry (fall 2013)
- 24. Hojun Jang: Difference between industrial designers and engineering designers (summer, fall 2013, spring 2014)
- 25. Adusei Marian: Assisting toolkit design for international students to adapt at UNIST (summer 2013, spring 2014)
- 26. Jaehee Kim: Design a black box (summer 2013)
- 27. Jungmin Park: Industry internship (summer 2013)
- 28. Jungsu Lee: Solar turtle ship design and Development (summer 2012)
- 29. Ikchan Ju: Solar turtle ship design and Development (summer 2012)
- 30. Kwangsu, Park: Solar turtle ship design and Development (summer, 2012)
- 31. Jieun Bae: Industry internship (summer, 2012)

### **EXTERNAL THESIS EXAMINATION - PhD**

- Mechanical Engineering Department, UNIST Korea, PhD Mechanical Engineering, External Examiner, Jeongso Lee, "Design Procedure for Wearable Hand Systems" (2020)
- Swinburne University, Australia, PhD Design Engineering, External Examiner, Jung-Ok Kuys, "Transit-oriented design research for an improved multimodal EV bus system for Malaysia 2020" (2018)

### **COURSES TAUGHT**

### Undergraduate courses

DES303 Product Design I (2021-2024)

- DES432 Creative Design II (2022, 2023)
- DES431 Creative Design I (2022, 2023)
- DES232 3D CAD (2016-2024)
- IID315 Design Methodology (2015-2020)
- DHE40201 Creative Design (2013-2014)
- IID40101 Product System Design (2012)
- IID31201 Design Knowledge & Skill III (2012)
- DHE31101/IID232 3D CAD & Prototyping (2011-2015)
- IID30401 Design Research Methodology (2011,2013)
- IID22301 Design Graphics (2010)

### **Graduate Courses**

- CDE516 3D CAD & Mechanical Design (2016-2019)
- CDE531 Integrated Design Project III (2017-2018)
- DHE521 Design Engineering Practice (2015)
- DHE519 Design Engineering Theory and Methodology (2014)
- DHE520 Design Practice: Theory & Methodology (2013)
- DHE512 Research Methodology (2011-2014)
- DHE518 Innovative Product Development (2011)

- END -