

The image is a composite graphic. A central vertical red bar contains white text. On either side of this bar are vertical panels showing aerial views of a university campus. The left panel shows a green lawn with a fountain and a paved walkway. The right panel shows a large, multi-story classical building with many columns and a wide set of stairs leading up to it. The background of the entire image is a dense forest of green trees under a blue sky with some clouds.

# CAITech LAB

(Center for Advanced Information Technology)

권오병 교수 연구실

KYUNG HEE UNIVERSITY

# 교수님 소개



## 권오병 교수

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### • 학력사항

1988. 02. 서울대학교 경영대학 경영학 (B.B.A.)

1990. 09. 한국과학기술원 경영과학 경영정보학 (M.S.)

1995. 02. 한국과학기술원 경영과학 경영정보학 (Ph.D)

### • 경력사항

2004. 03. - 현재 경희대학교 경영대학 교수

2021. 12. - 현재 경희대학교 학무부총장(서울)

2021. 05. - 2021. 12. 경희대학교 경영대학 교수

2016. 08. - 2018. 04. 경희대학교 미래정책원장, 한국대학기획처장협의회 회장

2009. 09. - 2011. 02. San Diego State University, MIS학과 겸임교수

2002. 03. - 2003. 08. School of Computer Science, Carnegie Mellon University,  
Visiting Scientist

2001. 03. - 2002. 02. 아르헨티나 Handong Instituto de Información Technologica,  
Dean

1996. 03. - 2004. 02. 한동대학교 경영경제학부 부교수

1995. 03. - 1996. 02. 연변과학기술대학 경영정보학과 조교수

# 교수님 소개

## • 학회

- IEEE SMC PC Member
- 한국경영교육학회 부회장
- 한국IT서비스학회 이사
- 한국정보시스템학회 이사
- 한국의사결정학회 이사

## • 학술활동

- 한국지능정보시스템학회 회장
- 한국경영정보시스템학회 부회장
- APJIS 편집위원
- 로고스경영연구, 신앙과학문 편집위원장
- APJBR 편집위원장

## • 교육

- AI비즈니스
- 4차산업혁명과 지속가능사회
- 메타버스 비즈니스
- 캡스톤디자인 <우주산업과 행성경제>
- 빅데이터 분석론
- 경영정보시스템

SCIENCE Chosun

### [스페이스K] “지구는 좁다...기업의 다음 무대는 우주” 경영학자의 ‘행성경제론’

권오병 경희대 경영학과 교수 인터뷰  
 민간 우주전문가 모임 K-스페이스 워킹그룹 결성  
 “확성 100만명 이주는 기업 주도 우주개발 서막”  
 우주 산업 생태계 조성은 과학자, 공학자뿐 한계  
 지금은 모든 산업이 우주경제를 바라봐야 할 때”



# 교수님 소개

한국강사신문

제주대학교, 제주 RIS 지역혁신 자율과제 '우주산업 경진대회' 성료...경희대 권오병 교수 등강 등

[한국강사신문 윤선동 기자] 제주대학교(총장 김일환)는 교육부, 한국연구재단, 제주특별자치도, 제주테크노파크, 지역혁신플랫폼이 주최하고...

1개월 전



NATE

[스페이스K] "지구는 좁다...기업의 다음 무대는 우주" 경영학자의 '행성경제론'

현눈에 보는 오늘 : 홈 - 뉴스 : 권오병 경희대 경영학과 교수는 "꼭 로켓이나 위성을 만드는 전통의 우주기업은 물론 일반 기업에도 이제 우주가..."

2024. 6. 5.



Chosunbiz

[스페이스K 2024] 우주 포럼에 온 경영학 교수 "이제는 우주경영학 시대로 넘어가야" - 조선비즈

조선비즈 '스페이스K 2024' 포럼 개최 권오병 경희대 경영학과 교수 발표 '지구의 비즈니스 모델, 우주로 가져가야'. 이종현 기자, 입력 2024.06.05.

2024. 6. 5.



매일경제

㈜테크빌리지, 인공지능(AI)기반 VR 재활 치료 솔루션 제작 위한 MOU 체결

... ㈜테크빌리지(대표 최동훈)는 경희대학교와 '인공지능(AI)기술의 VR 재활의료분야 적용을 위한 공동연구 양해각서(MOU)'를 체결하고, 권오병 교수...

2020. 3. 13.



월간대한뉴스

경희대 권오병 교수팀, 데이터과학자 양성할 BK21플러스에 '데이터 과학에 기반한 경영 전문 연구인력 양성 사업' 선정

[시사매거진2580=송재호 기자] 인터넷 및 3차 정보화 시대가 급속도로 발전하면서, 이전에는 존재감이 없었던 데이터 수집, 통계 관련 직업에 대한...

2016. 6. 2.



월간중앙

[커버스토리] 월간중앙·경희대 공동기획 | 권오병 경희대 부총장이 말하는 공공 부문 ESG 평가가 필요한 이유

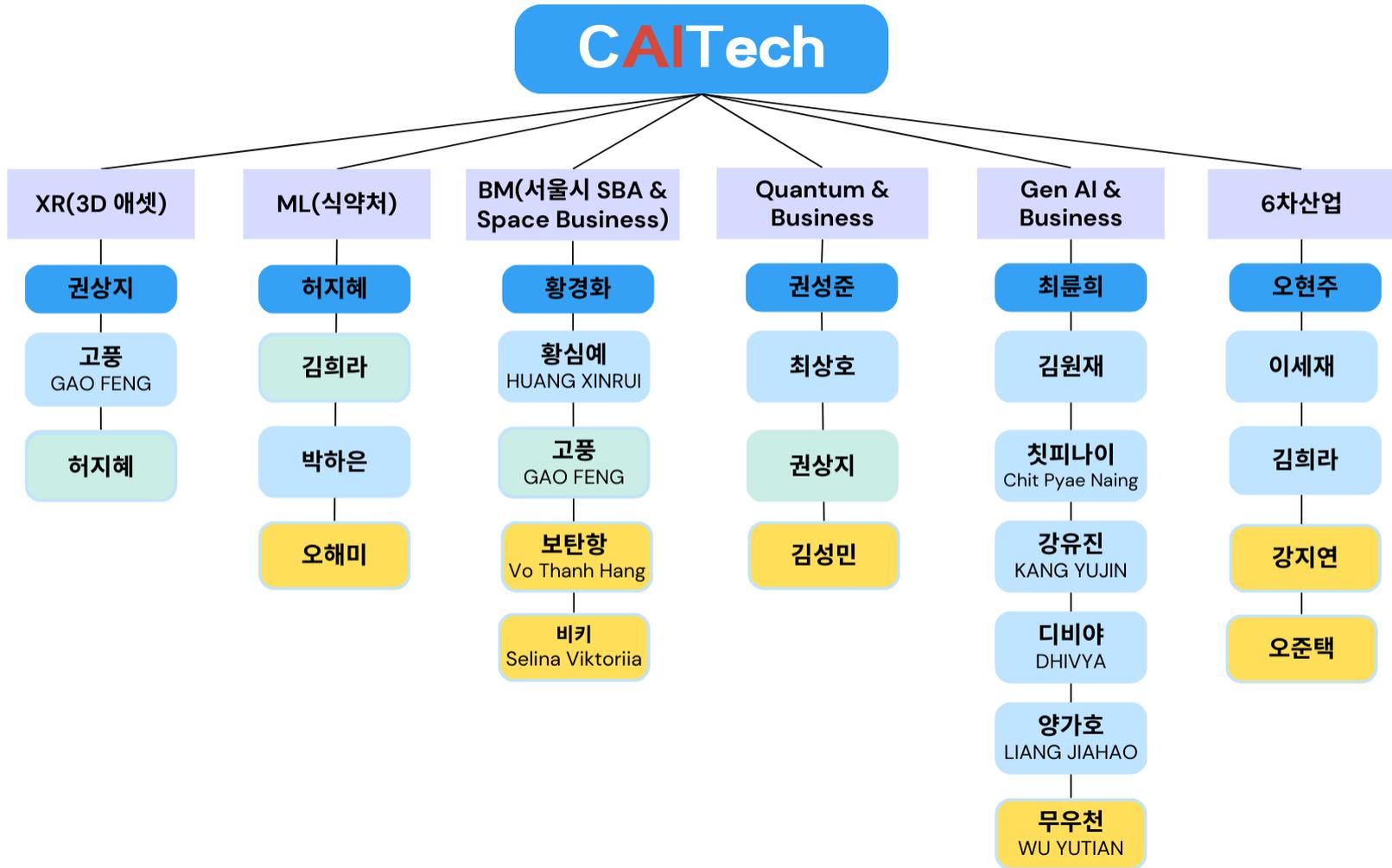
위기(危機)라는 단어는 '위험'과 '기회'가 결합돼 만들어졌다. 21세기 인류는 기후변화와 반복되는 팬데믹 공포, 경제와 일자리 위기 등 메가 리스크...

2023. 5. 17.



경희대 권오병 부총장, 국방 우주 관련 협업 강조

# 연구실 조직도



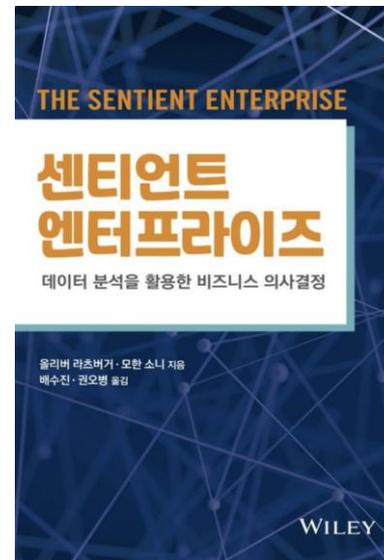
# SSK 4차산업혁명연구단 학술연구교수

배수진 박사 Bae, Sujin 2016년 입학 / 2021년 2월 졸업



## ◆ 주요 연구 분야

- AR, VR, MR, XR 등 메타버스
- 메타 휴먼 등 가상 휴먼 수용 연구
- 생성형 인공지능 기술 수용 연구
- 우주 비즈니스 연구
- NFT 수용 연구



# 연구원 소개(박사과정)



황경화 / Hwang, Kyunghwa (2021년 3월 입학)

- Metaverse, Space business, AIX(AI Transformation) and Gen AI



권성준 / Kwon, Seongjun (2022년 3월 입학)

- Information System Management&Strategy, Technology Adoption, Quantum Computing, Big Data Analytics, Artificial Intelligence



김원재 / Kim, Weonjae (2022년 3월 입학)

- Big Data Management, Art&Culture management, Social Value

# 연구원 소개(박사과정)



최상호 / Choi, Sang-ho (2022년 9월 입학)

- Micro MIS, Big Data Business Management, Public Data Utilization, and XR Platform, Quantum Computing Analytics, GenAI, XAI



최륜희 / Choi, Ryun Hee (2022년 9월 입학)

- Gen AI, AI Ethics, Fintech & Financial Management



오현주 / Oh, Hyun Joo (2023년 3월 입학)

- Big Data Management, 6<sup>th</sup> Industry, Care Farming, Local Extinction, Agribusiness

# 연구원 소개(박사과정)



권상지 / Kwon, Sangji (2023년 9월 입학)

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- Big Data Business Management, Natural Language Processing(NLP), Prompt Engineering, Quantum machine learning



이세재 / Lee, Sejae (2024년 3월 입학)

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- Smart Farms related to agriculture, Climate Change through Big Data, object detection to agriculture



김희라 / Kim, Heera (2024년 9월 입학)

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- Organic agriculture, Agricultural research using generative artificial intelligence

# 연구원 소개(박사과정)



강지연 / Kang, (2025년 3월 입학)

- Big Data Business Management,



무우천 / WU YUTIAN, (2025년 3월 입학)

- Big Data Business Management,

# 연구원 소개(석사과정)

박예린 / Bak, Yerin  
(2022년 3월 입학)



GenAI, AI Application, XAI

박하은 / Park, Haeun  
(2023년 9월 입학)



Machine Learning

첫핏나잉 / Chit Pyae Naing  
(2023년 9월 입학)



GenAI, Social Media

황심예 / Huang, Xinrui  
(2023년 9월 입학)



Multimodal Deep Learning,  
XAI(Explainable AI),  
Social Media Marketing

허지혜 / Huh, Jihye  
(2024년 3월 입학)



Big Data Analytics  
&NLP

류홍양 / Hongyang Liu  
202X년 X월 입학



LMMs & Big Data

고풍 / Gao, Feng  
(2024년 3월 입학)



Big Data Analytics &  
Startup Ecosystem

양가호 / Liang, Jiahao  
(2024년 3월 입학)



Large Language Model



# 연구원 소개(석사과정)

강유진 / Kang, Yujin  
(2024년 3월 입학)



Big Data&LLM

디비야 / Dhivya  
(2024년 3월 입학)



Big Data Analytics

김성민 / Kim  
(2025년 3월 입학)



Big Data Analytics

보탄항 / VO THANH HANG  
(2024년 9월 입학)



MIS

셀리나 빅토리아  
(2024년 9월 입학)



Big Data Analytics  
&NLP

오준택 /  
2025년 3월 입학



LMMs & Big Data

오해미 /  
(2025년 3월 입학)



Big Data Analytics &  
Startup Ecosystem

## CAITech(Research Center for Advanced Information Technology, 차세대정보기술연구센터)

비즈니스 환경에 특화된 데이터 과학, 인공지능응용, XR+AI을 중점으로 연구

- 現 박사과정 11명, 석사과정 15명으로 구성
- 텍스트마이닝, 머신러닝, 딥러닝을 활용한 비즈니스 빅데이터 분석
- 딥러닝 기반 주가예측, 패션 이미지 자동 생성, 부적합 식품 예측, 공연 흥행 예측 등
- 인공지능 기반 실감 콘텐츠 개발, 메타버스 효과 평가 등
- 최근 16년간 연구실적 약 500건 이상

### 연구실적 통계(약 500건 이상)

(단위: 건)

국제 논문	국내 논문	국제 학회	국내 학회	연구 과제	특허	저서
104	110	58	100	47	67	18

기간: 2009.01.01 ~ 2025.02.28.



박사 8명, 석사 35명을 배출하였으며 현재 다양한 분야에 진출하여 활동하고 있음  
진출분야는 빅데이터 관련 기업 및 산업계(대기업, 해외 및 외국계기업 등), 교육계(대학교수), 정부기관 등

## 해외 및 외국계기업

- Ford
- SEAD Institute
- 사천항공
- China Telecom
- CTTC(중국 전자기술연구기관)

## 교육계

- 한신대학교 IT경영학과 조교수
- 웨인주립대학교 산업공학과 연구교수
- 경남대학교 산학협력중점교수
- 경희대학교 연구교수
- 국민대학교 연구교수

## 정부기관

- 서울바이오허브  
(한국보건산업진흥원)
- 한국국제협력단

## 대기업

- LG CNS
- HYUNDAI ELECTRIC
- 포스코ICT
- 카카오
- SK C&C
- 삼성 SDS

## 산업계

- 뉴시스
- 크래프톤
- KMAC
- 하나금융
- 한국능률협회컨설팅(KMAC)

## 빅데이터 관련 기업

- 마크로젠
- 더아이엠씨
- 인사이트코리아마케팅리서치
- 플래티어

졸업생  
취업현황

# 주요 연구성과

## 한국사회과학연구 지원사업(SSK) 중형단계 선정



[경희 FOCUS] 권오병 교수 연구팀, 한국사회과학연구 지원사업(SSK) 중형단계 선정

권오병 경영학과 교수 연구팀이 2020년 하반기 한국사회과학연구 지원사업(SSK) 중형단계에 선정됐습니다. SSK지원사업은 국내 사회과학 분야 우수 연구 집단을 양성하는 한국연구재단의 중장기 사업으로, 국가 및 사회의 수요에 대응할 수 있는 세계적 수준의 학제적·융합적 연구 집단 육성을 목표로 한다고 합니다. 연구팀은 2017년 '제4차 산업혁명과 융합적 공진화'라는 장기간 프로젝트를 수행하는 연구기관으로 선정돼 한양대, 가톨릭대 연구진과 함께 3년간 목표 대비 150%를 웃도는 질적, 양적 연구실적을 냈습니다!! 이를 기반으로 이번에 중형단계에 선정됐다고 하네요. 6개 대학이 참여해 '제4차 산업혁명 기술을 통한 융합적 공진화와 가치창출'이라는 주제로 연구를 수행하게 된다고 합니다.

학생들은 연구비 혜택을 받을 수 있고, 과목 개설을 통해 관련 분야를 학습할 수도 있습니다. 연구 결과가 강의로 이어지고, 책으로 출판되기 때문에 학생들에게도 도움이 되겠네요!! 지난해 'AI 비즈니스'라는 과목이 개설됐고, 이번 학기 '4차 산업혁명과 지속 가능 사회'라는 과목이 개설됐습니다. 관심있는 학생들은 참고해주세요~~

\*경희 미디어 [FOCUS]에서 더 자세한 내용을 확인하세요.



경희대 FOCUS (20.09.27) 발취 부분

## SSK 연구단 성과와 연구실의 SDG관련 성과를 UN 제네바포럼에서 발표함(22.12.12 ~16)

The collage includes several documents and a presentation slide. One document is titled "What role will the co-evolution of the 4th Industrial Revolution technology play for a sustainable society?" and discusses the convergence of digital, biological, and nanotechnology. Another document is titled "Convergent Co-Evolution and Value Creation through the 4th Industrial Revolution Technologies" and lists various research areas like AI, Robotics, and Biotechnology. A presentation slide from the UN World Economic Forum shows a circular diagram with SDG icons and text about the 4th Industrial Revolution's impact on society and the environment.



# 주요 연구성과

- *International Journal of Information Management*에 게재된 'Data quality management, data usage experience and acquisition intention of big data analytics'는 Elsevier에서 **5,876회** 뷰 기록 (**1063회** 인용)
- IJIM저널에서 가장 많이 읽혀진 논문의 하나로 게시
- **FWCI 기준 세계 상위 1%**



- **Social Media가 COVID-19에 미치는 영향**
- MIS분야 A+등급 저널인 *European Journal of Information Systems*에 게재 **1,826회** 뷰 기록(**50회** 인용)

<http://dx.doi.org/TJIS-2020-ER-0418.R2>

Running head (Verso): S. BAE ET AL.

Running head (Recto): EUROPEAN JOURNAL OF INFORMATION SYSTEMS

Accounting for social media effects to improve the accuracy of infection models: combatting the COVID-19 pandemic and infodemic

Sujin Bae<sup>a</sup>, Christine Sung<sup>b</sup>, AQ1 Ohbyung Kwon<sup>a</sup>

Edit Author(s)

<sup>a</sup> School of Management, Kyung Hee University, Seoul, Korea (The Republic Of);

<sup>b</sup> Jake Jabs College of Business & Entrepreneurship, Montana State University Bozeman, Bozeman, MT, United States

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ARTICLE HISTORY

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Accepted 07 February 2021

## ABSTRACT

During the COVID-19 pandemic, social media platforms such as Twitter, Facebook, etc. have played an important role in conveying information, both accurate and inaccurate, thereby creating mass confusion. As the response to COVID-19 has reduced face-to-face contact, communication via social media has increased. Evidence shows that social media affects disease (non-)prevention through the (im)proper distribution of information, and distorts the predictive accuracy of infection models, including legacy Susceptible-Exposed-Infectious-Recovered (SEIR) models. Our adjusted



# 주요 연구성과

- 인공지능 기술의 산업 활용 효과 관련 연구
- Sohn, K., & Kwon, O. (2020). Technology acceptance theories and factors influencing artificial intelligence-based intelligent products. *Telematics and Informatics*, 47, 101324. ( 598회 인용)
- Research Features Magazine(패션분야 GAN)

Informatics & Technology | K. Sohn, C. E. Sung, G. Koo & O. Kwon

## Artificial intelligence in the fashion industry

Research being carried out by a research team around Professor Ohbyung Kwon at Kyung Hee University and Dr. Christine Eunjung Sung at Jilin Jilin College of Business and Entrepreneurship, Montana State University, involves examining consumer evaluations of fashion products designed using generative adversarial networks (GAN), an artificial intelligence (AI) technology. The analysis compares buying behaviour and offer practical advice for businesses that are considering using GANs to develop products for the retail marketplace.

Research being carried out by Christine Kwon, Professor of Management Information System at Kyung Hee University, Christine Eunjung Sung, Assistant Professor of Marketing at Jilin Jilin College of Business and Entrepreneurship, Montana State University, together with Kyoungsoo Sohn, PhD student, and Culture Kwon, Master student, at Kyung Hee University, involves examining consumer evaluations of fashion products designed using a technology called generative adversarial networks (GAN). In the course of this study, the research team investigate how consumer purchase intentions and willingness to pay are affected by the consumption value associated with social products developed using GAN-generated images. They also compare consumers' evaluations of GAN-generated and non-GAN-generated fashion products to ascertain any differences between purchase intentions and willingness to pay. Furthermore, they assess whether disclosing the use of GAN technology influences consumers' evaluations.

**CONSUMPTION VALUES AND BUYING BEHAVIOUR**  
Fashion has symbolic, meaningful and emotional value. Retail buyers are increasingly looking to aesthetics and the consumer's hedonic motivation. The researchers use consumption value theory to explore customer buying behaviour and how it relates to image design.

Consumption value theory suggests that consumers' perceptions of perceived utility and benefits underpin their assessment of the value of a product and services. Using a multidimensional theory of consumption value, the researchers examine how the use of the consumption value-making AI technology influences consumers' purchase intentions, social value, emotional value and systems value.

The authors hypothesise that consumption values positively affect purchase intentions and that the hypothesis that the use of GAN technology affects the relationship between each of the four consumption values (functional, social, emotional and systems) and the consumer's purchase intentions.

and these will affect consumption values. As a technology is being applied to the retail fashion industry in order to improve consumption experiences. Consequently, the researchers want to identify the effect of this technology. Subjects are grouped according to their exposure to non-GAN technology. GANs with disclosure and GANs without disclosure, so that the researchers can test the hypothesis that there are differences among the three groups and each of the four consumer values.

**ALGORITHM AVERSION**  
Algorithm aversion occurs in a variety of situations including finance, manufacturing and healthcare. This can lead to higher-order consumer decision-making problems that affect the relationship between functional, social, emotional and systems consumption values and the willingness to pay.

**ETHICALITY**  
With regards to their awareness of AI, the researchers will test three categories: legitimacy, vicarious and realistic. Most studies used to test whether consumers will use the benefits and risks of AI technology. The authors believe that technology comes with high level of risk and benefits, which the algorithmic purchase high level of benefits and low level of risk of AI.

**EXPERIMENTAL METHODS AND PROCEDURE**  
The paper reports two phases and 20 participants sampled products in the form of GAN-generated and non-GANs.

Participants were directed to visit a website and generated one of several images of the long-sleeved shirts and evaluated it. Those in the first group viewed and evaluated top designs based on a non-GAN generated image. Participants in the second viewed top designs based on GAN-generated images but were not told that the designs were generated using AI. Those in the third group also viewed top designs based on GAN-generated images and this information was disclosed to them. The participants were asked to compare the GANs with disclosure and a design based on the original image. Interestingly, most members of the GAN without disclosure group asked if they could actually purchase the tops.

**RESULTS**  
Statistical analysis of the results revealed the influence of each consumption value dimension on the participants' willingness to pay and purchase intentions for social fashion products. Differences in the effects of purchase value on consumers' responses were observed, meaning the effects of AI technology. The results demonstrated that AI technology used, functional, social and systems consumption values affect willingness to pay. Furthermore, when GAN technology is used, social and systems consumption values affect purchase intentions. When participants were aware that GAN-generated images had been used, they tended to perceive the GAN-generated images as more novel than the original images.

www.ccsr.kyuh.ac.kr

- Sung, E. C., Bae, S., Han, D. I. D., & Kwon, O. (2021). Consumer engagement via interactive artificial intelligence and mixed reality. *International journal of information management*, 60, 102382.(195회 인용)

International Journal of Information Management 60 (2021) 102382

Contents lists available at ScienceDirect

International Journal of Information Management

journal homepage: [www.elsevier.com/locate/ijinfomgt](http://www.elsevier.com/locate/ijinfomgt)

ELSEVIER

Research Article

## Consumer engagement via interactive artificial intelligence and mixed reality

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ARTICLE INFO

**ABSTRACT**  
The use of immersive technologies has changed the consumption environment in which retailers provide services. We present findings from a study designed to investigate consumer responses toward a \$17 million AI-embedded mixed reality (MR) exhibit in a retail/entertainment complex which combines advanced technology entertainment with retail shopping. Findings from our study demonstrate that the quality of AI (i.e., speech recognition and synthesis via inclusive learning) associated with an augmented object increases MR immersion associated with spatial immersion, MR enjoyment, and consumers' perceptions of novel experiences. Collectively, these increase consumer engagement, and positively influence behavioral responses—specifically, purchase intentions and intention to share experiences with social groups. Overall, findings from this study show that interactive AI and MR technology open new avenues to promote consumer engagement.

**Keywords:**  
Artificial intelligence  
Mixed reality  
Consumer engagement  
Reality-enhanced technology  
Retail complex

1. Introduction

Retail dynamics have changed rapidly with the introduction of novel technological solutions, particularly immersive technologies (Dacko, 2017). Applied technologies such as artificial intelligence (AI), augmented reality, virtual reality, and mixed reality (MR) are among the biggest disruptors in the rapidly changing retail industry (Jack & Wolfe, 2017; Kishan, Dwivedi, Bindi, & Samsi, 2021; Rauscherbael, Felix, & Hirsch, 2019). According to Davenport, Guha, Grewal, and expert systems, neural networks, deep learning, physical robots, and robotic process automation. Examples of AI-powered technologies include robots, avatars, virtual bots, touchscreen kiosks, and narrow-casting (Balakrishnan & Dwivedi, 2021a; Grewal, Noble, Roggeveen, & Nordfalt, 2020; Huang & Rust, 2018; Pillai, Sivachand, & Dwivedi, 2020; Vimalakumar, Sharma, Singh, & Dwivedi, 2021) as AI has created new business and marketing opportunities (Omar, Siddiqui, & Dwivedi, 2019). AI also holds potential to promote consumer engagement through entertainment.

- **International Journal of Behaviour & Information Technology**에 게재된 'Effects of meta-human characteristics on user acceptance: from the perspective of uncanny valley theory' (2,209회 부 기록)

BEHAVIOUR & INFORMATION TECHNOLOGY  
https://doi.org/10.1080/0144929X.2024.2338408



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**Effects of meta-human characteristics on user acceptance: from the perspective of uncanny valley theory**

Sujin Bae<sup>a</sup>, Timothy Jung<sup>a,b</sup>, Justin Cho<sup>b</sup> and Ohbyung Kwon<sup>a</sup>

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**ABSTRACT**

Despite the potential of meta-humans in the virtual space, research on how consumers react to meta-humans is scarce. This study investigates the effects of meta-human characteristics on user acceptance. 280 responses from the online survey were analysed using structural equation modelling. Findings revealed that meta-humans outshine digital humans in terms of performance and user acceptance. Users encountering digital humans are affected by the uncanny valley in terms of appearance and function. However, users encountering meta-humans are affected only in terms of function. Social presence and perceived novelty are additional factors affecting user acceptance. Theoretically, this study contributes to the literature by confirming the existence of the uncanny valley effect in meta-humans and by expanding human likeness to appearance and behaviour. Although meta-humans have surpassed the uncanny valley in appearance, they still lack familiarity in terms of behaviour. Practically, meta-humans and meta-human modelling tools have been found to surpass existing digital human technology both in performance and user acceptance. However, behavioural human likeness must continue to be developed in order to further increase user acceptance. Furthermore, familiarity does not directly affect user acceptance but mediates satisfaction. As user acceptance follows satisfaction, marketers should investigate user satisfaction rather than improving human likeness.

**ARTICLE HISTORY**

Received 21 June 2023  
Accepted 29 March 2024

**KEYWORDS**

Metaverse; digital human; meta-human; uncanny valley; human likeness; user acceptance

**1. Introduction**

In a survey conducted in the US in 2022, 82% of business executives from diverse industries stated that they plan on incorporating the Metaverse into their business operations in the next 3 years (PwC 2022). The proliferation of extended reality (XR) and Metaverse technologies necessitates a higher quality of virtual experiences (Suzuki et al. 2020). In order to create memorable experiences for users, the content must be more realistic, human-machine interactions more immersive and interactive, and the sense of presence more immediate (Barreda-Ángeles, Aletis-Guillaume, and Pereda-Baños 2020). The use of realistic immersive content is already increasing in popularity in many sectors, such as theatre performances (Salihbegovic 2020), tourism (Noh and Ro 2021), education (Leow and Chng 2021), and e-commerce (Stein et al. 2021). Immersive experiences include virtual avatars. Currently, digital humans are already widely used. In this

expressions (Silva and Bonetti 2021). Most recently, meta-humans, hyper-realistic digital humans that are very similar to real humans in both appearance and movement, have been introduced. On the contrary, meta-humans refer to a much more advanced digital human with greatly enhanced visual and functional capabilities (Gawand and Demirel 2020b). Meta-humans are able to move in ways and perform functions that humans cannot (Dean 2013). Whereas creation of digital humans can take several months, modern modelling tools such as the MetaHuman Creator can create meta-humans in just a few hours. The strength of the MetaHuman Creator lies in their ability to generate hyper-realistic images compared to conventional Digital Human Modelling (DHM) techniques, which has aimed to depict more realistic human appearances and behaviours. In this sense, the use of meta-humans is expected to increase cost efficiency greatly for businesses (Dharma and Suryadi

- **International Journal of Computers in Human Behavior**에 게재된 'What drives technology-enhanced storytelling immersion? The role of digital humans' (60회 인용)

Computers in Human Behavior 132 (2022) 107246

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**Computers in Human Behavior**

journal homepage: [www.elsevier.com/locate/comhumbeh](http://www.elsevier.com/locate/comhumbeh)

ELSEVIER

**What drives technology-enhanced storytelling immersion? The role of digital humans**

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<sup>d</sup>KyungHee University, School of Management, Seoul, South Korea  
<sup>e</sup>Center for Advanced Information Technology, KyungHee University, School of Management, Seoul, South Korea

**ARTICLE INFO**

**Keywords:**

Digital human  
Storytelling  
Augmented reality  
Artificial intelligence  
Experience economy theory

**ABSTRACT**

In this research, we investigate consumer responses to technology-enhanced storytelling marketing via augmented digital humans in two different contexts. We test the role of an augmented digital human stimulus as a moderator for storytelling satisfaction in a technology-enhanced retail complex. Building on visual perception theory and information processing theory, the findings from our study reveal sequential links between the four realms of experience economy theory in a mixed reality environment and subsequent effects on storytelling satisfaction, which in turn are boosted by digital human storytelling. Overall, our findings reveal that digital human storytelling is an effective long-term marketing strategy in technology-enhanced environments.

**1. Introduction**

Retailers are quickly adopting emerging technologies to enhance customer service interactions, both online and in stores (Ovicko, 2017). According to Hackl and Wolfe (2017) and Rauschnabel (2021), applied technologies are disrupting the consumer market, thereby increasing demand and expectations to design meaningful consumer experiences. Previous research shows that incorporating applied technologies such as augmented reality (AR) into marketing strategies increases consumer engagement because it boosts immersion (Deng, Unnava, & Lee, 2019) and positive experiences (Lundbeck, Jung, & Rauschnabel, 2019; Rauschnabel, Rubin, van Dieck, Krey, & Jung, 2022). Research also shows that applied technology marketing in consumer contexts transforms information into engaging content for consumers, contributing significantly to positive experiences and satisfaction with retail consumption (Ellison, de Bruiter, Chylinski, Maher, & Keeling, 2017; Rauschnabel, Felia, & Himech, 2019; Sung, Bae, Han, & Kwon, 2021). Immersive technologies such as artificial intelligence (AI) (Balakrishnan & Dwivedi, 2021; Gavetti, Noble, Jaggarwan, & Nonfink, 2020; Huang & Rust, 2018; Pillai, Srivastava, & Dwivedi, 2020; Vimalakumar, Sharma, Singh, & Dwivedi, 2021), AR (Hilken, Keeling, de Buyter, Maher, & Chylinski, 2020; Rauschnabel, 2021; Rauschnabel et al., 2019; Sung, 2020, 2021; Sung, Han, & Choi, 2022), an extension of AR called

mixed reality (MR) (Dehghani, Lee, & Mashatan, 2020), and digital humans (Lovesy, Sagar, & Broadbent, 2020) are becoming increasingly popular in the consumer market. Specifically, AI is defined as systems that mimic human personalities and characteristics, with capabilities to engage in human-like speech, learning, and problem solving (Russell & Norvig, 2002; Sung et al., 2021) and the potential to augment and replace human tasks in industrial, intellectual, and social applications (Dwivedi et al., 2021). AI includes robots, avatars, and virtual bots with a human-like appearance (Balakrishnan & Dwivedi, 2021; Grewal et al., 2020; Huang & Rust, 2018; Pillai et al., 2020; Vimalakumar et al., 2021). AR uses computer vision and object recognition to impose digital content (e.g., graphics, video, audio) onto consumers' real environments (Flavián, Baladés-Sánchez, & Oriús, 2019; Georgiou & Kyza, 2017; Hackl & Wolfe, 2017), thereby combining the real environment with the graphically augmented environment (Himech, Felia, & Rauschnabel, 2020; Rauschnabel et al., 2019; Sung et al., 2022). As an extension of AR, MR seamlessly blends the physical and virtual worlds into a singular immersive reality (Dehghani et al., 2020), similar to a realistic form of AR (Mishra & Colubertoni, 1999; Rauschnabel, 2021; Schmalz & Treierberg, 2021). For example, retailers can use MR—which promotes increased immersion vs. traditional AR mobile apps (Sung et al., 2021)—to seamlessly integrate digital images into the shopping environment without requiring consumers to use their mobile devices.

# 주요 연구성과

구분	논문제목	학술지명	권	호	연월
국제	[SSCI] Leveraging Quantum Machine Learning to Address Class Imbalance: A Novel Approach for Enhanced Predictive Accuracy.	Symmetry	17	2	2025.01
	[SSCI] Effects of Value-Belief-Norm Theory, ESG, and AI on Space Tourist Behavior for Sustainability With Three Types of Space Tourism.	Journal of Travel Research	63	6	2024.07
	[SSCI] XR and mental wellbeing: state of the art and future research directions for the Metaverse.	Frontiers in Psychology	15	-	2024.03
	[SSCI] Effects of meta-human characteristics on user acceptance: from the perspective of uncanny valley theory.	Behaviour & Information Technology	-	-	2024.04
	[SSCI] Space tourism: Value-attitude-behavior theory, artificial intelligence, and sustainability.	Journal of Retailing and Consumer Services	77	-	2024.03
	[SSCI] Factors affecting the intention to continue to visit the virtual world metaverse.	International Journal of Mobile Communications	24	4	2024.01
국내	수입식품 위해 요소 예측 성능 고도화를 위한 RASFF 데이터 통합 모델	지능정보연구	30	4	2024.12
	우주 비즈니스 전문인력 양성을 위한 경영교육 커리큘럼 연구	한국경영교육학회	39	6	2024.12
	생성형AI 제작 가상인간에 의한 위험커뮤니케이션이 안전수칙 준수 행동에 미치는 영향	한국전자거래학회지	29	4	2024.11
	작품의 비물리적 특성이 신진작가 미술품 가격에 미치는 영향 연구	한국예술경영학회	72	-	2024.11
	Understanding Customers' Purchase Intentions of Luxury Fashion NFTs: The Roles of Brand Engagement and Perceived Risk	한국전자거래학회지	29	1	2024.03
	판별시스템 중심의 지능형공공서비스 성공에 영향을 미치는 요인 연구: 정보시스템성공모형을 중심으로	정보시스템연구	32	1	2023.03
	콘텐츠 생성기, 매체풍부성 및 콘텐츠 주제가 학습성과에 미치는 영향: 중국 직장인 대상 ESG 경영 교육 중심으로	글로벌경영학회지	20	1	2023.02

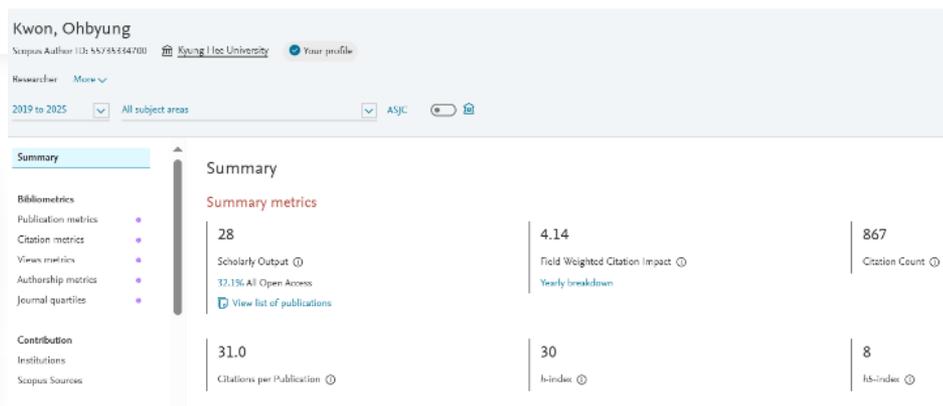
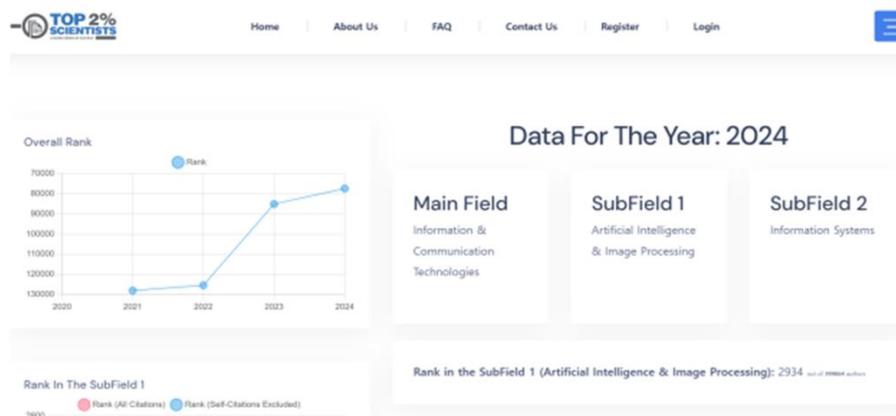
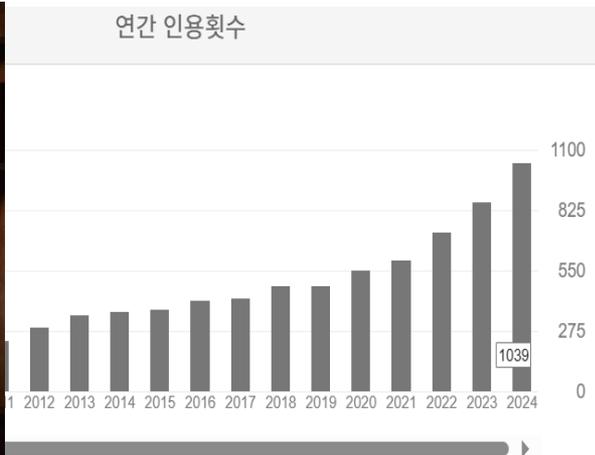
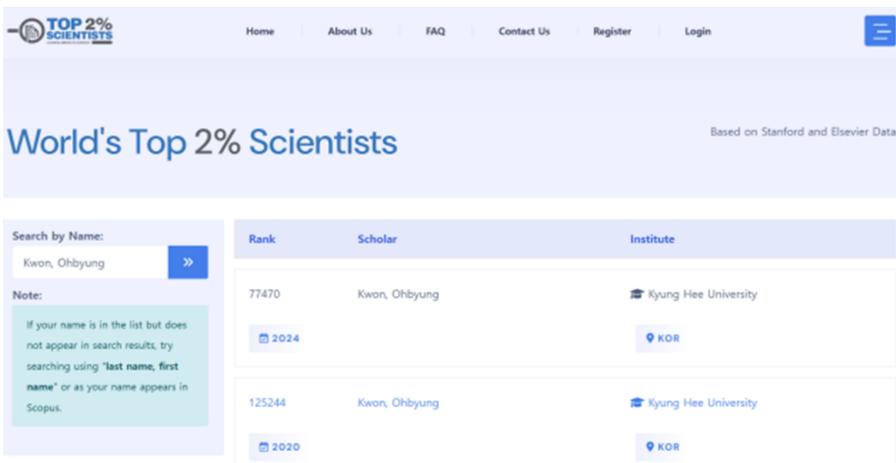
# 주요 연구성과

산·학·연 전반에 걸쳐 빅데이터를 기반으로 한 다양한 프로젝트를 수행 (연간 평균 3건 이상)

프로젝트명	지원기관	연구기간	비고
디지털 콘텐츠 창조산업 생태계 활성화를 위한 생성형 AI 기술을 활용한 약자동행 및 문화관광분야의 창작작콘텐츠 유통플랫폼 서비스 구축	재단법인 서울경제진흥원	2024.08.01~2025.07.31	진행중
[2024-1 대학 부설 연구소] 스마트 국방우주융합연구소 항공우주청 개청과 우주국방 학술 진흥 및 연구 경쟁력 강화 방안	경희대학교	2024.03.01~2025.02.28	진행중
[2024-1 정책_연구인력] 해외 주요 대학 신진 연구/교육 사례 분석을 통한 정책제언 - SDGs, 4차산업혁명기술, 학제 간 융합 교육 사례를 중심으로	경희대학교	2024.03.02~2025.02.28	진행중
[BK21 4단계] 지속가능 빅데이터 신산업 선도인력 교육연구단 (참여)	교육과학기술부	2020.09.01~2027.08.31	진행중
[SSK] 제4차 산업혁명 기술을 통한 융합적 공진화와 가치창출 (주관)	한국연구재단	2020.09.01~2027.08.31	진행중
스마트 수입식품 안전관리 개발 연구	식품의약품안전처	2022.01.01~2025.12.31	진행중
2022년도 새싹(SeSAC)클래스 인 캠퍼스 사업	서울산업진흥원	2022-0701~2023.06.30	종료
다품종 소량 생산 스마트 팩토리 및 비대면 주문 서비스를 위한 지능형 IoT 급여기 기술개발	중소벤처기업부	2022.05.02~2023.05.01	종료
다품종 소량 비건육 사료 생산 스마트팩토리 기반 구축 및 비대면 큐레이팅 중개 시스템 구축 개발	(통합)정보통신기획평가원	2022.04.01~2023.03.31	종료
키르기즈 감염대응 및 보건의료실무역량강화를 위한 간호교육 선진화사업	한국연구재단(학술진흥)	2022.04.01~2023.03.31	종료
전 군 통합 감염병 감시지원체계 개발 (정책연구 및 ISP)	국군의무사령부	2021.11.19~2023.02.28	종료

# 주요 연구성과

우리 연구실이 권오병교수님과 함께 해낸 성적!  
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# 교수님 대외활동



>> 스포츠산업과 금융생태계 강연



>> 조선비즈 초청 우주비즈니스 특강



>> 2022 융합경영MBA 춘계학술대회 참가



>> 국립 현대미술관 심의위원

# 연구실 20주년 행사



>> 졸업생 재학생이 함께...



>> 졸업생 선배들의 연구실 발전기금 후원



>> 24.10.31 서울 바이오허브



>> 교수님 소개 및 인사말



# 연구실 이모저모 : 연구도 열심히



>> [프로젝트] 다품종 소량 생산 스마트 팩토리 및 비대면 주문 서비스를 위한 지능형 IoT 급여기 기술개발 실험



>> [세미나] SSK 4차산업혁명 공진화 심포지엄 (주관)



>> 랩세미나



>> [캡스톤디자인 수업] 메타버스 · VR 실험

# 연구실 이모저모: 친목도 화이팅있게...



>> 2024년 추계 항공우주학회(강원도 정선 하이원 숙소)



>> 2025년 2월 졸업식



>> 2024년 스승의 날



>> MT

# 입학 시 혜택

- [1] 전용 연구 공간 제공
- [2] 장학금 (TA, RA, BK 장학 등) 수혜
- [3] 연구 인건비 (각종 국책과제, 기업체과제)
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