AI Business Research Lab

김재경 교수님

교수님 소개

교내 주요 경력

現 경희대학교 경영대학 빅데이터경영 & MIS 전공 정교수	2000년 9월 ~ 현재
現 4단계 BK21사업 지속가능 빅데이터 신산업 선도인력 교육 연구단장	2020년 9월 ~ 현재
現 경희대학교 일반대학원 빅데이터응용학과 학과장	2020년 9월 ~ 현재
前 경희대학교 경영대학원 원장	2013년 9월 ~ 2020년 10월
前 경희대학교 산학협력단장 및 연구산학협력처 처장 겸임	2011년 4월 ~ 2013년 9월

대표 수상 내역

우수논문상(한국지능정보학회 2021 춘계학술대회)	2021년 6월
Excellence Research Paper(ICEC2019)	2019년 7월
한국연구재단 국가연구개발사업 및 재단 발전 공로상	2016년 5월
한국정보화진흥원 대한민국SNS산업대상(인재양성부문)	2016년 2월

김재경 교수
(Prof. Jae Kyeong Kim)

한국과학기술원 산업공학 박사
한국과학기술원 산업공학 석사
서울대학교 산업공학 학사

AI Business Research Lab 연구 분야

경희대학교 KYUNG HEE UNIVERSITY

Deep Learning & Machine Learning	Big Data Analysis	Recommender Systems	Network Management
데이터에 내재된 패턴, 규칙, 의미 등을 추출하고 이를 다양한 분야에 적용하는 연구 **| 자연어 처리, 텍스트·소셜미디어 마이닝 |**	**다양하고 방대한 빅데이터 원천으로부터 지식을 추출하는 데이터 마이닝 기법 응용 연구** **| 정형·비정형 데이터 분석 |**	**사용자의 선호에 부합하는 상품 및 서비스를 추천하는 시스템의 초개인화 연구** **| 추천 시스템 |**	**네트워크 사회의 특성을 분석하고 이를 경영 기법에 적용하는 응용 연구** **| 소셜네트워크분석, 고객관계관리(CRM) |**
〈SSCI〉 Hea In Lee et al., "A Multi-Period Product Recommender System in Online Food Market based on Recurrent Neural Networks", Sustainability, Vol.12 , No.3 , pp.1-13, 2020.01.	〈SSCI〉 Sang ho Lee, Jun Yong Xiang, Jae Kyeong Kim, "Information technology and productivity: Empirical evidence from the Chinese electronics industry" Information & Management, Vol.48, No.2-3, pp79-87, 2011.3.	〈SCI〉 Kim, H. K., Ryu, Y. U., Cho, Y., & Kim, J. K., "Customer-driven content recommendation over a network of customers ", IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans, Vol.42, No.1, pp.48-56, 2011.01.	〈SSCI〉 Hyea Kyeong Kim, Young U. Ryu, Yoonho Cho, Jae Kyeong Kim, "Customer-Driven Content Recommendation Over a Network of Customers", IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART A-SYSTEMS AND HUMANS, Vol.42, No.1, pp48-56, 2012.01.
국제 학술지 12건, 국제 학술대회 6건, 국내 학술지 5건, 국내 학술대회 17건, 특허 출원 및 등록 5건	국제 학술지 32건, 국제 학술대회 23건, 국내 학술지 68건, 국내 학술대회 53건, 특허 출원 및 등록 8건	국제 학술지 20건, 국제 학술대회 27건, 국내 학술지 25건, 국내 학술대회 35건, 특허 출원 및 등록 12건	국제 학술지 6건, 국제 학술대회 5건, 국내 학술지 19건, 국내 학술대회 10건, 특허 출원 및 등록 2건

AI Business Research Lab 연구 분야

Deep Learning & Machine Learning

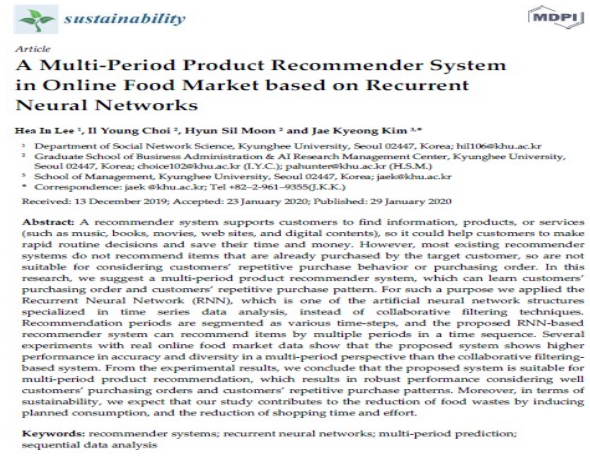
데이터에 내재된 패턴, 규칙, 의미 등을 추출하고 이를 다양한 분야에 적용하는 연구

| 자연어 처리, 텍스트·소셜미디어 마이닝 |

〈SSCI〉
Hea In Lee et al., "A Multi-Period Product Recommender System in Online Food Market based on Recurrent Neural Networks", Sustainability, Vol.12 , No.3 , pp.1-13, 2020.01.

국제 학술지 12건, 국제 학술대회 6건,
국내 학술지 5건, 국내 학술대회 17건,
특허 출원 및 등록 5건

딥러닝으로 실제 데이터를 분석하고 이를 기반으로 추천 시스템을 구축하는 것을 목표로 다양한 연구를 진행


sustainability

MDPI

Article

A Multi-Period Product Recommender System in Online Food Market based on Recurrent Neural Networks

Hea In Lee [1], Il Young Choi [2], Hyun Sil Moon [2] and Jae Kyeong Kim [3,*]

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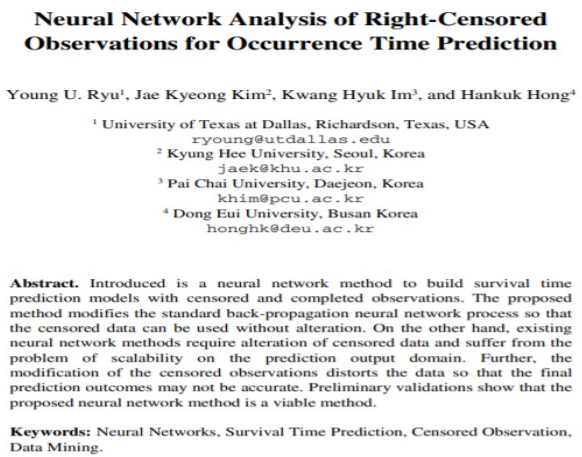
Abstract: A recommender system supports customers to find information, products, or services (such as music, books, movies, web sites, and digital contents), so it could help customers to make rapid routine decisions and save their time and money. However, most existing recommender systems do not recommend items that are already purchased by the target customer, so are not suitable for considering customers' repetitive purchase behavior or purchasing order. In this research, we suggest a multi-period product recommender system, which can learn customers' purchasing order and customers' repetitive purchase pattern. For such a purpose we applied the Recurrent Neural Network (RNN), which is one of the artificial neural network structures specialized in time series data analysis, instead of collaborative filtering techniques. Recommendation periods are segmented as various time-steps, and the proposed RNN-based recommender system can recommend items by multiple periods in a time sequence. Several experiments with real online food market data show that the proposed system shows higher performance in accuracy and diversity in a multi-period perspective than the collaborative filtering-based system. From the experimental results, we conclude that the proposed system is suitable for multi-period product recommendation, which results in robust performance considering well customers' purchasing orders and customers' repetitive purchase patterns. Moreover, in terms of sustainability, we expect that our study contributes to the reduction of food wastes by inducing planned consumption, and the reduction of shopping time and effort.

Keywords: recommender systems; recurrent neural networks; multi-period prediction; sequential data analysis

Recurrent Neural Network


Neural Network Analysis of Right-Censored Observations for Occurrence Time Prediction

Young U. Ryu[1], Jae Kyeong Kim[2], Kwang Hyuk Im[3], and Hankuk Hong[4]

[1] University of Texas at Dallas, Richardson, Texas, USA
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[2] Kyung Hee University, Seoul, Korea
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[3] Pai Chai University, Daejeon, Korea
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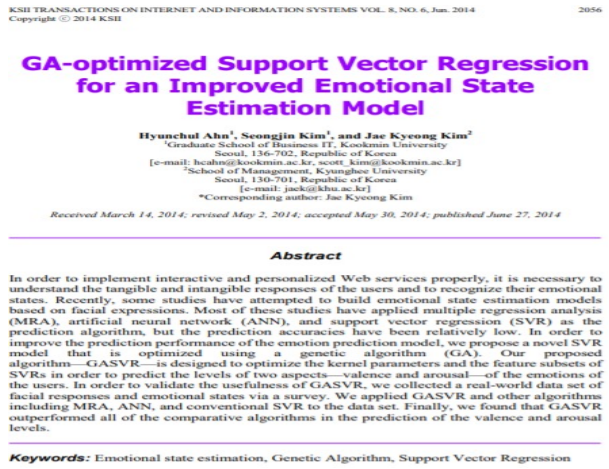
Abstract. Introduced is a neural network method to build survival time prediction models with censored and completed observations. The proposed method modifies the standard back-propagation neural network process so that the censored data can be used without alteration. On the other hand, existing neural network methods require alteration of censored data and suffer from the problem of scalability on the prediction output domain. Further, the modification of the censored observations distorts the data so that the final prediction outcomes may not be accurate. Preliminary validations show that the proposed neural network method is a viable method.

Keywords: Neural Networks, Survival Time Prediction, Censored Observation, Data Mining.

Neural Network


KSII TRANSACTIONS ON INTERNET AND INFORMATION SYSTEMS VOL. 8, NO. 6, Jun. 2014 2056
Copyright ⓒ 2014 KSII

GA-optimized Support Vector Regression for an Improved Emotional State Estimation Model

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[e-mail: hcahn@kookmin.ac.kr, scott_kim@kookmin.ac.kr]
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Abstract

In order to implement interactive and personalized Web services properly, it is necessary to understand the tangible and intangible responses of the users and to recognize their emotional states. Recently, some studies have attempted to build emotional state estimation models based on facial expressions. Most of these studies have applied multiple regression analysis (MRA), artificial neural network (ANN), and support vector regression (SVR) as the prediction algorithm, but the prediction accuracies have been relatively low. In order to improve the prediction performance of the emotion prediction model, we propose a novel SVR model that is optimized using a genetic algorithm (GA). Our proposed algorithm—GASVR—is designed to optimize the kernel parameters and the feature subsets of SVRs in order to predict the levels of two aspects—valence and arousal—of the emotions of the users. In order to validate the usefulness of GASVR, we collected a real-world data set of facial responses and emotional states via a survey. We applied GASVR and other algorithms including MRA, ANN, and conventional SVR to the data set. Finally, we found that GASVR outperformed all of the comparative algorithms in the prediction of the valence and arousal levels.

Keywords: Emotional state estimation, Genetic Algorithm, Support Vector Regression

Support Vector Regression

AI Business Research Lab 연구 분야

Big Data Analysis

다양하고 방대한 빅데이터 원천으로부터 지식을 추출하는 데이터 마이닝 기법 응용 연구

| 정형·비정형 데이터 분석 |

〈SSCI〉
Sang ho Lee, Jun Yong Xiang, Jae Kyeong Kim, "Information technology and productivity: Empirical evidence from the Chinese electronics industry" Information & Management, Vol.48, No.2-3, pp79-87, 2011.3.

국제 학술지 32건, 국제 학술대회 23건,
국내 학술지 68건, 국내 학술대회 53건,
특허 출원 및 등록 8건

Raw Data를 효과적으로 저장·사용·처리 하는 핵심 기술 연구 및
빅데이터 분석을 위한 새로운 알고리즘 개발 및 연구 수행

Journal of Psychology in Africa, 2019
Vol. 29, No. 1, 7–12, https://doi.org/10.1080/14330237.2019.1569301
© 2019 Africa Scholarship Development Enterprize

Routledge
Taylor & Francis Group

Predictors of life satisfaction among multicultural African families in South Korea

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[2]*Department of Cultural & Arts Management, Sangmyung University, Chungcheongnam-do, South Korea*
[3]*Research Institute Multicultural Community, Sejong University, Seoul, South Korea*
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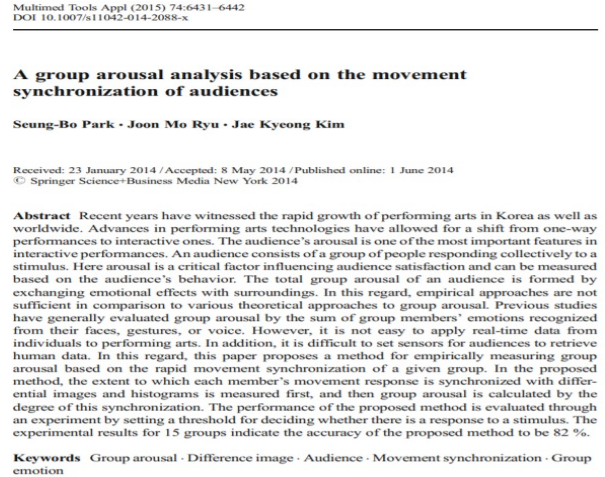
[5]*Department of Business Administration, Sejong University, South Korea*
**Corresponding author email: kshy4u@naver.com*

The aim of this study was to predict perceived life satisfaction of multicultural African families living in South Korea in terms of their fluency in the Korean language, government support for education, and the experience of discrimination. A total of 64 family members (29 women, 45.3%) completed measures of life satisfaction, Korean language fluency, public welfare assistance, and social discrimination. A hierarchical regression analysis determined that life satisfaction was higher among those with fluency in the Korean language and low or no reliance on public welfare programs. Experience of social discrimination was unrelated to life satisfaction. Host-country language fluency and livelihood self-sustenance seem to be key resources for families with immigrant spouses.

Keywords: experience of discrimination, fluency in Korean language, government support for education, life satisfaction, multicultural African families

Data Mining Technique



Multimed Tools Appl (2015) 74:6431–6442
DOI 10.1007/s11042-014-2088-x

A group arousal analysis based on the movement synchronization of audiences

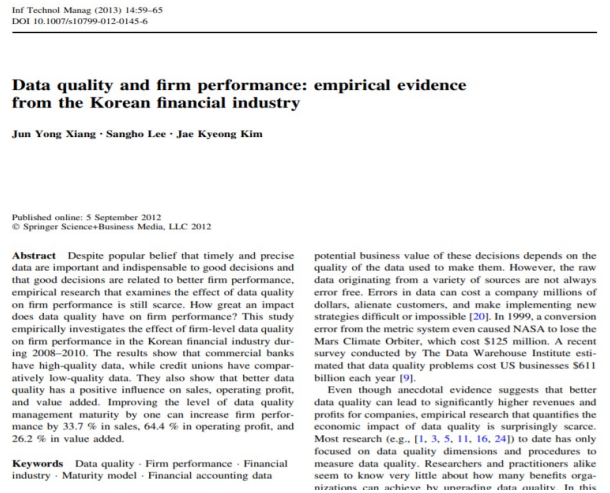
Seung-Bo Park · Joon Mo Ryu · Jae Kyeong Kim

Received: 23 January 2014 / Accepted: 8 May 2014 / Published online: 1 June 2014
© Springer Science+Business Media New York 2014

Abstract Recent years have witnessed the rapid growth of performing arts in Korea as well as worldwide. Advances in performing arts technologies have allowed for a shift from one-way performances to interactive ones. The audience's arousal is one of the most important features in interactive performances. An audience consists of a group of people responding collectively to a stimulus. Here arousal is a critical factor influencing audience satisfaction and can be measured based on the audience's behavior. The total group arousal of an audience is formed by exchanging emotional effects with surroundings. In this regard, empirical approaches are not sufficient in comparison to various theoretical approaches to group arousal. Previous studies have generally evaluated group arousal by the sum of group members' emotions recognized from their faces, gestures, or voice. However, it is not easy to apply real-time data from individuals to performing arts. In addition, it is difficult to set sensors for audiences to retrieve human data. In this regard, this paper proposes a method for empirically measuring group arousal based on the rapid movement synchronization of a given group. In the proposed method, the extent to which each member's movement response is synchronized with differential images and histograms is measured first, and then group arousal is calculated by the degree of this synchronization. The performance of the proposed method is evaluated through an experiment by setting a threshold for deciding whether there is a response to a stimulus. The experimental results for 15 groups indicate the accuracy of the proposed method to be 82 %.

Keywords Group arousal · Difference image · Audience · Movement synchronization · Group emotion

Image Detection



Inf Technol Manag (2013) 14:59–65
DOI 10.1007/s10799-012-0145-6

Data quality and firm performance: empirical evidence from the Korean financial industry

Jun Yong Xiang · Sangho Lee · Jae Kyeong Kim

Published online: 5 September 2012
© Springer Science+Business Media, LLC 2012

Abstract Despite popular belief that timely and precise data are important and indispensable to good decisions and that good decisions are related to better firm performance, empirical research that examines the effect of data quality on firm performance is still scarce. How great an impact does data quality have on firm performance? This study empirically investigates the effect of firm-level data quality on firm performance in the Korean financial industry during 2008–2010. The results show that commercial banks have high-quality data, while credit unions have comparatively low-quality data. They also show that better data quality has a positive influence on sales, operating profit, and value added. Improving the level of data quality management maturity by one can increase firm performance by 33.7 % in sales, 64.4 % in operating profit, and 26.2 % in value added.

Keywords Data quality · Firm performance · Financial industry · Maturity model · Financial accounting data

potential business value of these decisions depends on the quality of the data used to make them. However, the raw data originating from a variety of sources are not always error free. Errors in data can cost a company millions of dollars, alienate customers, and make implementing new strategies difficult or impossible [20]. In 1999, a conversion error from the metric system even caused NASA to lose the Mars Climate Orbiter, which cost $125 million. A recent survey conducted by The Data Warehouse Institute estimated that data quality problems cost US businesses $611 billion each year [9].

Even though anecdotal evidence suggests that better data quality can lead to significantly higher revenues and profits for companies, empirical research that quantifies the economic impact of data quality is surprisingly scarce. Most research (e.g., [1, 3, 5, 11, 16, 24]) to date has only focused on data quality dimensions and procedures to measure data quality. Researchers and practitioners alike seem to know very little about how many benefits organizations can achieve by upgrading data quality. In this

Regression Analysis

AI Business Research Lab 연구 분야

경희대학교 KYUNG HEE UNIVERSITY

Recommender Systems

사용자의 선호에 부합하는 상품 및 서비스를 추천하는 시스템의 초개인화 연구

| 추천 시스템 |

〈SCI〉
Kim, H. K., Ryu, Y. U., Cho, Y., & Kim, J. K., "Customer-driven content recommendation over a network of customers ", IEEE Transactions on Systems, Man, and Cybernetics-Part A: Systems and Humans, Vol.42, No.1, pp.48-56, 2011.01.

국제 학술지 20건, 국제 학술대회 27건,
국내 학술지 25건, 국내 학술대회 35건,
특허 출원 및 등록 12건

최근 이슈화되고 있는 딥러닝을 활용한 추천 시스템 구현 연구 및
사용자와 추천 상품의 숨겨진 특성 파악을 위한 분석 기법 개발 및 연구

Journal of Electronic Commerce Research, VOL 20, NO 3, 2019

ENHANCED COLLABORATIVE FILTERING: A PRODUCT LIFE CYCLE APPROACH

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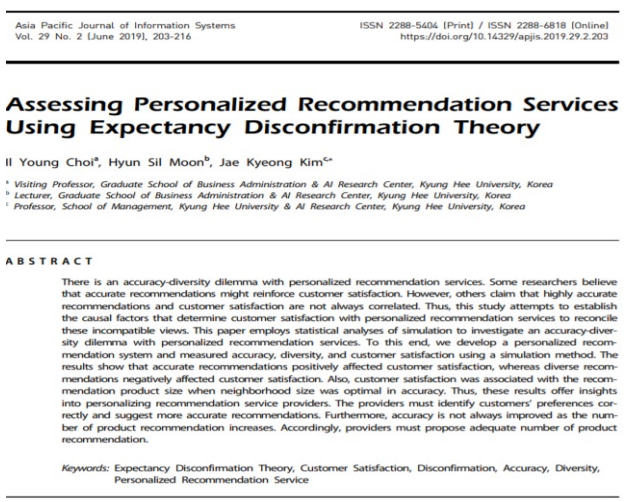
ABSTRACT

Recommender systems are ubiquitous not only among e-commerce enterprises but also among various brick-and-mortar firms. Popular collaborative filtering-based recommender systems use only individual customers' preferences discovered in their profiles containing historical purchase (or similar) records. On the other hand, the market trends of products are another factor that can substantially affect the likelihood of products being adopted. Consequently, there are rooms for further improvements in collaborative filtering-based recommendation. In this study, we propose the use of the product life cycle concept based on the Bass model and suggest an approach that integrates the general popularity effect (market trend) and the individual preference effect in order to improve recommendation effectiveness of collaborative filtering. Through experimental validation, we find that our approach of combining the product life cycle concept and collaborative filtering performs better than the approach based on typical user-based collaborative filtering alone. In addition, the experiment results show that the influence of preference and popularity effects may vary based on market characteristics. Consequently, the proposed approach can be used as a marketing tool functioning as a basis for valuable services to customers.

Keywords: Recommender system, Collaborative filtering, Product life cycle, Bass model, Hybrid recommender system

Bass Model -based Recommendaion



Asia Pacific Journal of Information Systems
Vol. 29 No. 2 (June 2019), 203-216
ISSN 2288-5404 (Print) / ISSN 2288-6818 (Online)
https://doi.org/10.14329/apjis.2019.29.2.203

Assessing Personalized Recommendation Services Using Expectancy Disconfirmation Theory

Il Young Choi[a], Hyun Sil Moon[b], Jae Kyeong Kim[c,*]

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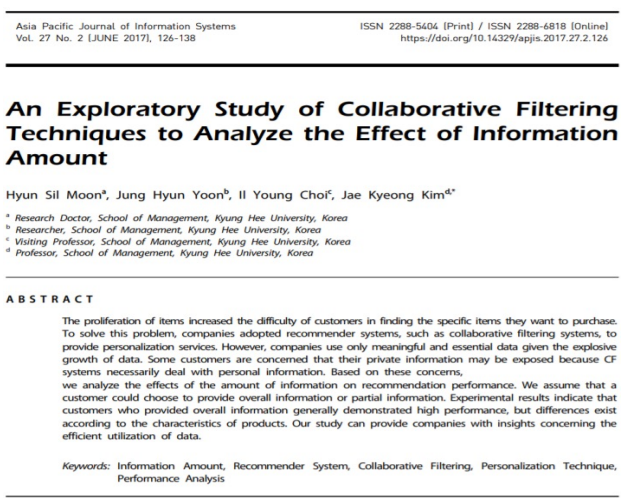
[b] Lecturer, Graduate School of Business Administration & AI Research Center, Kyung Hee University, Korea
[c] Professor, School of Management, Kyung Hee University & AI Research Center, Kyung Hee University, Korea

ABSTRACT

There is an accuracy-diversity dilemma with personalized recommendation services. Some researchers believe that accurate recommendations might reinforce customer satisfaction. However, others claim that highly accurate recommendations and customer satisfaction are not always correlated. Thus, this study attempts to establish the causal factors that determine customer satisfaction with personalized recommendation services to reconcile these incompatible views. This paper employs statistical analyses of simulation to investigate an accuracy-diversity dilemma with personalized recommendation services. To this end, we develop a personalized recommendation system and measured accuracy, diversity, and customer satisfaction using a simulation method. The results show that accurate recommendations positively affected customer satisfaction, whereas diverse recommendations negatively affected customer satisfaction. Also, customer satisfaction was associated with the recommendation product size when neighborhood size was optimal in accuracy. Thus, these results offer insights into personalizing recommendation service providers. The providers must identify customers' preferences correctly and suggest more accurate recommendations. Furthermore, accuracy is not always improved as the number of product recommendation increases. Accordingly, providers must propose adequate number of product recommendation.

Keywords: Expectancy Disconfirmation Theory, Customer Satisfaction, Disconfirmation, Accuracy, Diversity, Personalized Recommendation Service

Personalized Recommendation



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Vol. 27 No. 2 (JUNE 2017), 126-138
ISSN 2288-5404 (Print) / ISSN 2288-6818 (Online)
https://doi.org/10.14329/apjis.2017.27.2.126

An Exploratory Study of Collaborative Filtering Techniques to Analyze the Effect of Information Amount

Hyun Sil Moon[a], Jung Hyun Yoon[b], Il Young Choi[c], Jae Kyeong Kim[d,*]

[a] Research Doctor, School of Management, Kyung Hee University, Korea
[b] Researcher, School of Management, Kyung Hee University, Korea
[c] Visiting Professor, School of Management, Kyung Hee University, Korea
[d] Professor, School of Management, Kyung Hee University, Korea

ABSTRACT

The proliferation of items increased the difficulty of customers in finding the specific items they want to purchase. To solve this problem, companies adopted recommender systems, such as collaborative filtering systems, to provide personalization services. However, companies use only meaningful and essential data given the explosive growth of data. Some customers are concerned that their private information may be exposed because CF systems necessarily deal with personal information. Based on these concerns,
we analyze the effects of the amount of information on recommendation performance. We assume that a customer could choose to provide overall information or partial information. Experimental results indicate that customers who provided overall information generally demonstrated high performance, but differences exist according to the characteristics of products. Our study can provide companies with insights concerning the efficient utilization of data.

Keywords: Information Amount, Recommender System, Collaborative Filtering, Personalization Technique, Performance Analysis

Collaborative Filtering Recommendation

AI Business Research Lab 연구 분야

Network Management

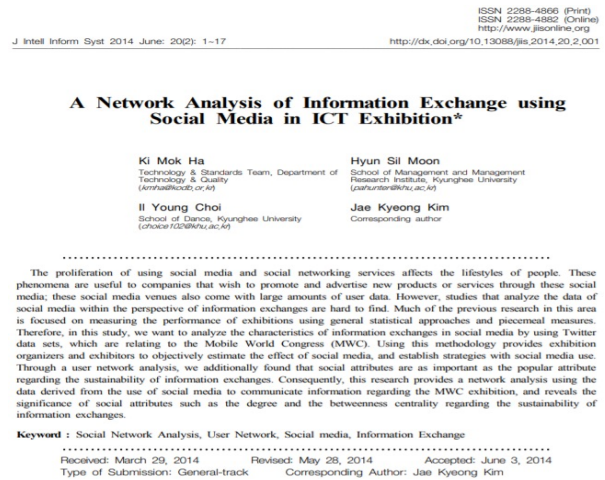
네트워크 사회의 특성을 분석하고 이를 경영 기법에 적용하는 응용 연구

| 소셜네트워크분석, 고객관계관리(CRM) |

〈SSCI〉
Hyea Kyeong Kim, Young U. Ryu, Yoonho Cho, Jae Kyeong Kim, "Customer-Driven Content Recommendation Over a Network of Customers", IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART A-SYSTEMS AND HUMANS, Vol.42, No.1, pp48-56, 2012.01.

국제 학술지 6건, 국제 학술대회 5건,
국내 학술지 19건, 국내 학술대회 10건,
특허 출원 및 등록 2건

네트워크 및 복잡계(Complex System)에 기반한 개인화 서비스
네트워크 분석 기법을 이용한 고객 관리(CRM)



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A Network Analysis of Information Exchange using Social Media in ICT Exhibition*

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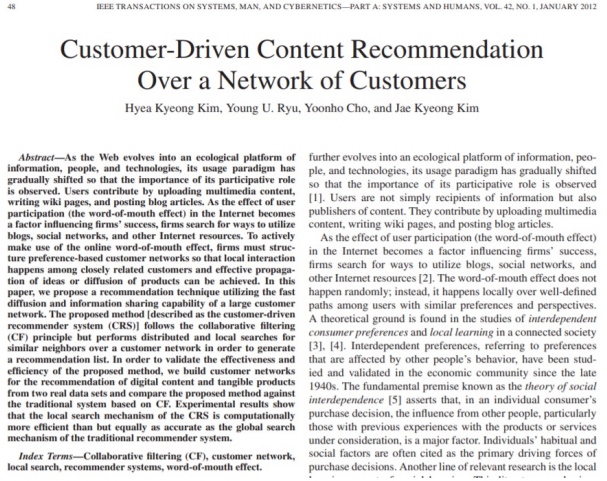
Hyun Sil Moon — School of Management and Management Research Institute, Kyunghee University (parhunter@khu.ac.kr)
Il Young Choi — School of Dance, Kyunghee University (choice102@khu.ac.kr)
Jae Kyeong Kim — Corresponding author

The proliferation of using social media and social networking services affects the lifestyles of people. These phenomena are useful to companies that wish to promote and advertise new products or services through these social media; these social media venues also come with large amounts of user data. However, studies that analyze the data of social media within the perspective of information exchanges are hard to find. Much of the previous research in this area is focused on measuring the performance of exhibitions using general statistical approaches and piecemeal measures. Therefore, in this study, we want to analyze the characteristics of information exchanges in social media by using Twitter data sets, which are relating to the Mobile World Congress (MWC). Using this methodology provides exhibition organizers and exhibitors to objectively estimate the effect of social media, and establish strategies with social media use. Through a user network analysis, we additionally found that social attributes are as important as the popular attribute regarding the sustainability of information exchanges. Consequently, this research provides a network analysis using the data derived from the use of social media to communicate information regarding the MWC exhibition, and reveals the significance of social attributes such as the degree and the betweenness centrality regarding the sustainability of information exchanges.

Keyword : Social Network Analysis, User Network, Social media, Information Exchange

Received: March 29, 2014 Revised: May 28, 2014 Accepted: June 3, 2014
Type of Submission: General-track Corresponding Author: Jae Kyeong Kim

Social Network Analysis



48 IEEE TRANSACTIONS ON SYSTEMS, MAN, AND CYBERNETICS—PART A: SYSTEMS AND HUMANS, VOL. 42, NO. 1, JANUARY 2012

Customer-Driven Content Recommendation Over a Network of Customers

Hyea Kyeong Kim, Young U. Ryu, Yoonho Cho, and Jae Kyeong Kim

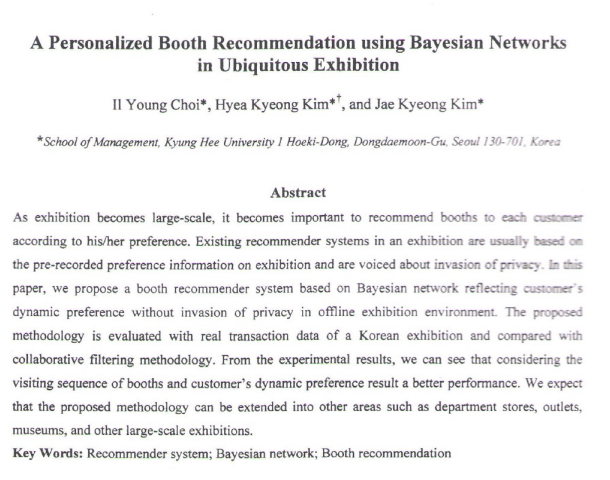
Abstract—**As the Web evolves into an ecological platform of information, people, and technologies, its usage paradigm has gradually shifted so that the importance of its participative role is observed. Users contribute by uploading multimedia content, writing wiki pages, and posting blog articles. As the effect of user participation (the word-of-mouth effect) in the Internet becomes a factor influencing firms' success, firms search for ways to utilize blogs, social networks, and other Internet resources. To actively make use of the online word-of-mouth effect, firms must structure preference-based customer networks so that local interaction happens among closely related customers and effective propagation of ideas or diffusion of products can be achieved. In this paper, we propose a recommendation technique utilizing the fast diffusion and information sharing capability of a large customer network. The proposed method [described as the customer-driven recommender system (CRS)] follows the collaborative filtering (CF) principle but performs distributed and local searches for similar neighbors over a customer network in order to generate a recommendation list. In order to validate the effectiveness and efficiency of the proposed method, we build customer networks for the recommendation of digital content and tangible products from two real data sets and compare the proposed method against the traditional system based on CF. Experimental results show that the local search mechanism of the CRS is computationally more efficient than but equally as accurate as the global search mechanism of the traditional recommender system.**

Index Terms—**Collaborative filtering (CF), customer network, local search, recommender systems, word-of-mouth effect.**

further evolves into an ecological platform of information, people, and technologies, its usage paradigm has gradually shifted so that the importance of its participative role is observed [1]. Users are not simply recipients of information but also publishers of content. They contribute by uploading multimedia content, writing wiki pages, and posting blog articles.

As the effect of user participation (the word-of-mouth effect) in the Internet becomes a factor influencing firms' success, firms search for ways to utilize blogs, social networks, and other Internet resources [2]. The word-of-mouth effect does not happen randomly; instead, it happens locally over well-defined paths among users with similar preferences and perspectives. A theoretical ground is found in the studies of *interdependent consumer preferences* and *local learning* in a connected society [3], [4]. Interdependent preferences, referring to preferences that are affected by other people's behavior, have been studied and validated in the economic community since the late 1940s. The fundamental premise known as the *theory of social interdependence* [5] asserts that, in an individual consumer's purchase decision, the influence from other people, particularly those with previous experiences with the products or services under consideration, is a major factor. Individuals' habitual and social factors are often cited as the primary driving forces of purchase decisions. Another line of relevant research is the local

Customer Network



A Personalized Booth Recommendation using Bayesian Networks in Ubiquitous Exhibition

Il Young Choi*, Hyea Kyeong Kim*†, and Jae Kyeong Kim*

*School of Management, Kyung Hee University 1 Hoeki-Dong, Dongdaemoon-Gu, Seoul 130-701, Korea

Abstract

As exhibition becomes large-scale, it becomes important to recommend booths to each customer according to his/her preference. Existing recommender systems in an exhibition are usually based on the pre-recorded preference information on exhibition and are voiced about invasion of privacy. In this paper, we propose a booth recommender system based on Bayesian network reflecting customer's dynamic preference without invasion of privacy in offline exhibition environment. The proposed methodology is evaluated with real transaction data of a Korean exhibition and compared with collaborative filtering methodology. From the experimental results, we can see that considering the visiting sequence of booths and customer's dynamic preference result a better performance. We expect that the proposed methodology can be extended into other areas such as department stores, outlets, museums, and other large-scale exhibitions.

Key Words: Recommender system; Bayesian network; Booth recommendation

Bayesian Network

Footprints of AI Business Research Lab

경희대학교 KYUNG HEE UNIVERSITY

기술기반 기업의 지속성장 지원을 위한 정형*비정형 데이터 연계기반 컨설팅 서비스 플랫폼 개발	체험 시뮬레이션을 통한 지식기반 창업학습 및 운영지원 서비스 시스템	빅데이터 기반의 인터랙티브 융합 마케터 개발	관객 반응에 대응하는 진화형 인터랙티브 전시 통합제어 기술 개발	위치기반 로컬 네트워크를 이용한 실시간 개인화 서비스 방법 개발
2020.5. ~ 2022.12. 산업통상자원부	2016.5. ~ 2019. 4. 한국산업기술평가관리원/ 산업통상부	2014.7. ~ 2016.6. 중소기업청	2011.7. ~ 2014.3. 한국콘텐츠진흥원/ 문화체육관광부	2011.7. ~ 2013.3. 지식경제부

Career of Graduate Students

경희대학교 KYUNG HEE UNIVERSITY

박사

Hanmi Global · R&D 선도 한미약품(주)	김재식
UDI	김혜경
SK 주식회사 C&C	안도현
KMU 국민대학교 KOOKMIN UNIVERSITY	문현실
	최일영, 최주철

박사수료

KTNET 한국무역정보통신	백승만
BC 비씨카드	채경희
SPC	이중희
투이컨설팅	오희영

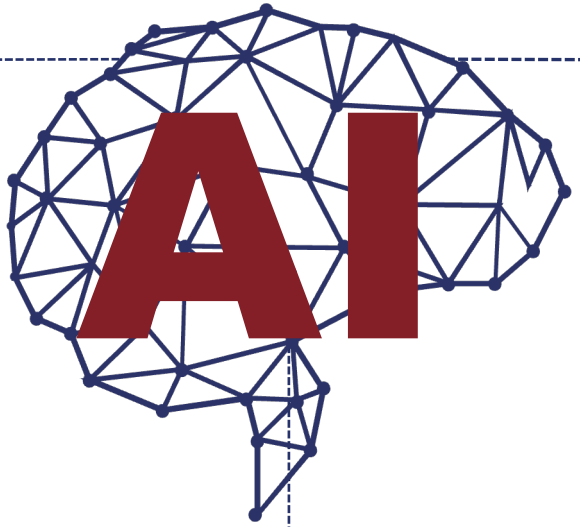
석사

SHINSEGAE CHOSUN HOTEL	권택성
LINE	김승태, 정민규
kt	성다윗
Hyundai Card	조용주
Kdata 한국데이터산업진흥원 Korea Data Agency	하기목
TmaxSoft (주)티맥스소프트	하주혁
RESPECTED TRUSTED PROFESSIONAL SAMIL	오혁
ECMiner	박원국
Daumsoft	이혜인
Bigdata AiXr	최재호(대표이사)

AI Business Research Lab Activity

VISION

진취적이고 능동적인 업무
처리 능력 배양



MISSION

체계적인 학습 및 연구
자율적인 연구 분위기

Lab Seminar
지도교수님의 지도하에 매주 시행되는 세미나와 체계적인 학습 및 연구

R&D Project
정부 R&D 프로젝트 수행으로 진취적이고 능동적인 업무처리 능력 배양

Creative Research
창의적 연구 수행 독려를 위한 자율적인 연구 분위기

AI Business Research Lab Activity

AI Business Research Lab News

경희대학교 KYUNG HEE UNIVERSITY

Focus

"사람은 영원한 미지의 영역이자 연구 대상"

2019-09-17 연구/산학

김재경 경영대학 교수와 이혜인 일반대학원 석사 졸업생의 논문이 전자상거래 분야의 가장 오래된 학술대회인 '국제전자상거래학술대회'에서 '최우수 논문상'을 수상했다.

김재경 경영대학 교수·이혜인 일반대학원 석사 졸업생
전자상거래 분야 가장 오래된 '국제전자상거래학술대회' 최우수 논문상 수상

온라인쇼핑은 이제는 일반적인 구매행위이다. 시공간에 관계없이 필요한 물건을 구매할 수 있어 영향력이 커지고 있다. 온라인쇼핑의 학술적 용어는 '전자상거래(electronic commerce)'이다. 전자상거래는 정보통신망이 통신수단을 넘어 시장이라는 개념으로 확대된 개념이다. 경영학, 경제학에서도 주목하는 이유이다.

1998년 창설해 올해로 21회를 [illegible]래학술대회(International Conference on Electronic Commerce)'는 전자[illegible]. 부산에서 개최된 올해 대회에서는 약 10개국의 100여 개 논문이 [illegible]구성원이 받았다. 김재경 경영대학 교수(경영대학원 원장)의 지도로 [illegible]한 '딥러닝기법을 이용한 온라인쇼핑몰에서의 다기간 상품추천시스템 연구'가 [illegible]업생이 작성[illegible]수와 이혜인 졸업생에게 연구의 성과와 연구자로서 자세에 대해 들어봤다.

'최우수 논문상'을

대학주보

[illegible]·교육 지속 가능 발전 분야 집중할 것"

4단계 BK21(Br[illegible] 예비 선정됐다. 우리신문은 네 번째로 '지속가능 빅데이터 신산업[illegible]' 단장인 김재경 교수를 만났다. '빅데이터 산업'의 미래를 개척하고 있는 그들의 이야기를 들어본다.

빅데이터는 디지털 시대의 도래와 함께 급성장한 분야다. 정보통신 기술의 [illegible]로 인터넷이 상용화되며 생성되는 데이터의 양이 급증했고, 이제는 통계 분석과 인공지능을 활용한 빅데이터의 체계적인 분석이 중요해진 시대를 마주하고 있다.

빅데이터에는 정형 데이터는 물론 비정형 데이터도 포함돼 있다. 정형 데이터는 정의된 구조로 정형화된 형태지만, 비정형 데이터는 그 반대의 경우를 뜻한다. 원활한 데이터 분석을 위해선 인공지능 시스템을 잘 파악해야 한다. 전통적인 방법으로 빅데이터를 분석하려면 많은 시간과 노동력이 필요했지만, 지금은 딥러닝(Deep Learning), 클라우드 컴퓨팅(Cloud Computing) 등 다양한 기술을 활용한 인공지능이 업무를 대신해주고 있기 때문이다.

▲ 김 교수는 "다양한 전문가와 협력해 질적으로 우수한 연구 활동을 진행하고 아시아 최고 수준의 빅데이터 인재를 만들겠다"는 포부를 밝혔다. (사진=김가연 기자)

4단계 BK21의 핵심 목표는 '새로운 융복합 분야를 지원하는 혁신 인재 양성'이다. 빅데이터연구단도 단과대학의 벽을 허물고 융복합을 추구하기 위해 나섰다. 서울캠퍼스와 국제캠퍼스에서 10명의 교수진들이 힘을 모아 빅데이터융합학과를 신설했다. 이에 따라 빅데이터융합학과에 지원한 학생들은 교수진의 다양성을 바탕으로 경영학, 공학, 이학 등 자유롭게 전공 분야를 선택할 수 있다. 연구단장 김재경 교수(빅데이터융합학)는 "경영학과, 산업공학과, 물리학과까지 다양한 분야의 전문가들이 모인 것이 BK21 사업에 선정될 수 있었던 결정적인 이유였다"고 말했다.

4단계 BK21

대학주보

[illegible]ship 장학증서 수여식 개최

[illegible]울캠퍼스 본관 408호에서 창의혁신 KHU-Fellowship 장학증서 수여식이 열렸다.

[illegible]혁신 KHU-Fellowship 장학증서 수여식이 6월 7일 서울캠퍼스(서울캠) 본관에서 열렸다.

2021년 [illegible]신 KHU-Fellowship은 [illegible]원사업단이 운영하는 지원 프로그램으로, 대학원생의 안정적인 연구 활[illegible]한다. 연구과제 수행에 소요되는 연구비를 지원하며, 과제 당 최고 600만원까지 장학금이 수여된다.

장학증서 수여식은 박규창 대학원혁신지원사업단[illegible]의 인사말로 시작했다. 박 단장은 "대학원혁신지원사업단이 작년 11월 구성되고 올해 1월 완성되면서 어떻게 [illegible]을 혁신적으로 변화시킬지 고민을 많이 했다"며 "앞으로 KHU-Fellowship 예산 규모를 더욱 확대하고 많은 학생들을 지원해 학생들이 국제적으로 경쟁력을 가질 수 있도록 돕겠다"고 말했다.

'4차산업혁명시대 핀테크와 물류는'..국제전자상거래학술대회 성료

ICEC2019 부산 그랜드호텔서 열려

[illegible]세계 약 100편 논문 발표

등록 2019-07-05 오후 6:09:49
수정 2019-07-05 오후 6:09:49

가 가

[illegible]랜드호텔에서 열린 제21회 ICEC2019에서 참가자들이 연설을 듣고 있다. 사진=ICEC2019 제공

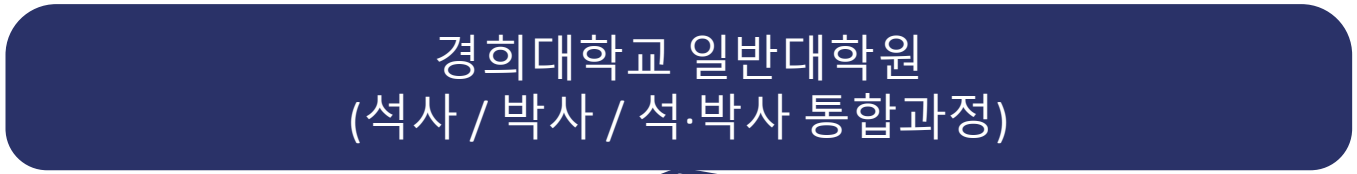
[illegible]성혁 해양수산부 장관, 오거돈 부산시장, 정지원 한국거래소 이사장 등이 참[illegible]우 한국해양수산개발원 본부장이 맡았다.

[illegible] 전자상거래 컨퍼런스는 그간 4차 산업혁명, 공유경제 등 다양한 주제를 가지[illegible]해 국제전자상거래의 발전을 이뤄냈다"며 "물동량 처리실적 세계 6위, 세계 2[illegible]하는 항만·해양의 도시 부산에서 이번 행사를 개최해 더욱 뜻깊다"고 말했다.

[illegible] 포럼, 아카데믹 포럼, 튜토리얼, 기술 논문 세션 등으로 나눠 다양한 프로그램[illegible]세션에서는 한국, 미국, 호주, 중국, 일본 등 10여개 국가에서 온 학자들이 약[illegible]다.

기사1 원문 : https://www.khu.ac.kr/kor/focus/detail.do?seq=2131051&page=20&pageSize=5
기사2 원문 : http://media.khu.ac.kr/khunews/view.asp?code1=1012006022802&code2=NULL&headline=&kha_no=28096&page=1&search=&keyword=
기사3 원문 : http://media.khu.ac.kr/khunews/view.asp?code1=1012006022801&code2=NULL&kha_no=28549
기사4 원문 : https://www.edaily.co.kr/news/read?newsId=03099606622551568&mediaCodeNo=257&OutLnkChk=Y

AI Business Research Lab Major & Contact



빅데이터응용학과 (경영학/공학/이학)

✓ 최고 수준의 빅데이터 분석 전문가를 양성하는 교육기관을 목표로 하고 있으며, 이를 위해 새로운 분석 기법을 연구

경영학과 (경영학)

빅데이터 경영 전공

✓ 빅데이터가 기업 경영에 미치는 영향을 체계적으로 이해하고, 기업의 실정에 맞는 단계적인 혁신을 추구할 수 있는 방안을 연구

MIS 전공

✓ 지식 정보화 시대를 맞이하여 정보기술의 효율적 활용을 통하여 경영조직의 경쟁력을 향상시킬 수 있는 방안을 연구

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감사합니다

Thank You for listening

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