

## **Kyong Jin SHIM**

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## **Education**

PhD, University of Minnesota, United States of America, 2011  
Master of Science, University of Minnesota, United States of America, 2006  
Bachelor of Science, Louisiana State University, United States of America, 2004

## **Academic Appointments**

Associate Professor of Information Systems (Practice), School of Computing and Information Systems, SMU, Jan 2023 - Present  
Assistant Professor of Information Systems (Practice), School of Computing and Information Systems, SMU, Jan 2012 - Dec 2022  
Research Fellow, Department of Computer Science and Engineering, University of Minnesota, United States of America, Jan 2009 - Jan 2011

## **Academic Administrative Positions**

PCE Quality Assurance Academic Reviewer, Office of the Provost, SMU, Jan 2025 - Present  
Coordinator, BSc (IS) Business Analytics Track, School of Computing and Information Systems, SMU, Jul 2021 - Present  
Coordinator, BSc (IS) Business Analytics Track, School of Computing and Information Systems, SMU, Jul 2018 - Jun 2019  
Academic Director, DHL-SMU Analytics Lab, School of Computing and Information Systems, SMU, Sep 2016 - Jun 2018  
APEX Business IT Case Competition Organising Committee Supervisor, School of Computing and Information Systems, SMU, Jul 2015 - Jun 2016

## **Other Positions and Affiliations**

Principal Engineer, Technical Manager, Ninja Metrics, United States of America, Jan 2009 - Jan 2011  
Senior Software Engineer, Thomson Reuters, United States of America, Jan 2007 - Jan 2009  
Software Engineer, Co-op, IBM, United States of America, Jan 2006 - Jan 2007  
Software Engineer Co-op, IBM, United States of America, Jan 2005

Bioinformatics Researcher and Programmer, Department of Biological Sciences, Louisiana State University, United States of America, Jan 2003 - Jan 2004

### **Professional Certifications**

Professional Certificate in XR Immersive, MAGES Institute, 2022

AWS Certified SysOps Administrator - Associate, Amazon Web Services, 2021

AWS Certified Developer - Associate, Amazon Web Services, 2020

AWS Certified Machine Learning - Specialty, Amazon Web Services, 2020

AWS Certified Data Analytics - Specialty, Amazon Web Services, 2020

AWS Certified Solutions Architect - Associate, Amazon Web Services, 2019

AWS Certified Cloud Practitioner, Amazon Web Services, 2019

### **Awards and Honors**

Innovative Teacher, Centre for Teaching Excellence, Singapore Management University, 2021

SMU-X Excellent Teacher (Nominee), Centre for Teaching Excellence, 2021

NSF Student Travel Award, IEEE International Conference on Data Mining, University of Minnesota, Minneapolis, Minnesota, USA, University of Minnesota, Minneapolis, 2010

Agnes Hansen Award, Sigma Delta Epsilon/Graduate Women in Science, University of Minnesota, Minneapolis, Minnesota, USA, University of Minnesota, Minneapolis, 2005

Research Excellence Award, Department of Computer Science and Engineering, University of Minnesota, Minneapolis, Minnesota, USA, University of Minnesota, Minneapolis, 2005

Undergraduate Tuition Award, Southern Illinois University, Carbondale, Illinois, USA, Southern Illinois University, 2002

High Honors Distinction Award, Southern Illinois University, Carbondale, Illinois, USA, Southern Illinois University, 2002

Non-Resident Tuition Award, Louisiana State University, Baton Rouge, Louisiana, USA, Louisiana State University, 2002

Computer Science Alumni Scholarship, Southern Illinois University, Carbondale, Illinois, USA, Southern Illinois University, 2001

Illinois State Scholar Finalist, the State of Illinois, Carbondale Community High School, Carbondale, Illinois, USA, Carbondale Community High School, 2000

Global Housing/Ambassador and Forest Hall International Student Scholarship, Southern Illinois University, Carbondale, Illinois, USA, Southern Illinois University, 2000

### **Professional Memberships**

Technical Expert and Reviewer, i.JAM, 2014 - 2015

## RESEARCH

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### Research Interests

Social Computing  
Data Mining  
Games and Virtual Worlds  
Cloud Computing  
Data Engineering & Architecture

### Publications

#### Journal Articles [Refereed]

Assessing the effectiveness of a chatbot workshop as experiential teaching and learning tool to engage undergraduate students, by SHIM, Kyong Jin; MENKHOFF, Thomas; TEO, Lydia Ying Qian; ONG, Clement Shi Qi. (2023). *Education and Information Technologies*, 28 (12), 16065-16088.  
<https://doi.org/10.1007/s10639-023-11795-5> (Published)

Assessing the Language of Chat for Teamwork Dialogue, by SHIBANI, Antonette; KOH, Elizabeth; LAI, Vivian; SHIM, Kyong Jin. (2017). *Educational Technology & Society*, 20 (2), 224-237. (Published)

AI, Virtual Worlds, and Massively Multiplayer Online Games, by CHEN, Hsinchun; ZHANG, Yulei; Bainbridge, W. S.; SHIM, Kyong Jin; Pathak, N.; Ahmad, M. A.; DeLong, C.; Borbora, Z.; Mahapatra, A.; Srivastava, J.. (2011). *IEEE Intelligent Systems*, 26 (1), 80-89.  
<https://doi.ieeecomputersociety.org/10.1109/MIS.2011.21> (Published)

AMOD: a morpholino oligonucleotide selection tool, by KLEE, Eric W.; SHIM, Kyong Jin; Pickart, Michael A.; Ekker, Stephen C.; Ellis, Lynda B. M.. (2005). *Nucleic Acids Research*, 33 (Suppl 2), W506-W511.  
<http://dx.doi.org/10.1093/nar/gki453> (Published)

#### Conference Proceedings

Exploring students' adoption of ChatGPT as a mentor for undergraduate computing projects: PLS-SEM analysis, by GOTTIPATI, Swapna; SHIM, Kyong Jin; SHANKARARAMAN, Venky. (2023.0). *Proceedings of the 31st International Conference on Computers in Education Conference, Matsue, Shimane, 2023 December 4-8*

, (pp. 40-45) Japan: Asia-Pacific Society for Computers in Education. (Published)

Peer learning in an undergraduate Linear Algebra course: A Social Network Analysis, by THULASIDAS, Manoj; SHIM, Kyong Jin; TEO, Jonathan. (2023.0). *2023 IEEE International Conference on Teaching, Assessment and Learning for Engineering (TALE): Auckland, November 27 - December 1: Proceedings*, (pp. 1-8) Piscataway, NJ: IEEE. <https://doi.org/10.1109/TALE56641.2023.10398401> (Published)

AI for connectivism learning: Undergraduate students' experiences of ChatGPT in advanced programming courses, by GOTTIPATI, Swapna; SHIM, Kyong Jin; SHANKARARAMAN, Venky. (2023.0). *Proceedings of Americas Conference on Information Systems 2023: Panama, August 10-12*, (pp. 1-10) Atlanta, GA: Association of Information Systems. [https://aisel.aisnet.org/amcis2023/sig\\_ed/sig\\_ed/16/](https://aisel.aisnet.org/amcis2023/sig_ed/sig_ed/16/) (Published)

ChatGPT, can you generate solutions for my coding exercises? An evaluation on its effectiveness in an undergraduate Java programming course, by OUH, Eng Lieh; GAN, Benjamin Kok Siew, SHIM, Kyong Jin; WLODKOWSKI, Swavek. (2023.0). *ITiCSE 2023: Proceedings of the 2023 Conference on Innovation and Technology in Computer Science Education, Turku, Finland, July 10-12*, (pp. 54-60) New York: ACM. <https://doi.org/10.1145/3587102.3588794> (Published)

Career track based capstone course design for information systems curriculum, by GOTTIPATI, Swapna;

SHIM, Kyong Jin; DATTA, Subhajit. (2023.0). *Proceedings of the 2023 IEEE Global Engineering Education Conference (EDUCON), Kuwait, May 1-4*, Piscataway, NJ: IEEE. <https://doi.org/10.1109/EDUCON54358.2023.10125198> (Published)

VR Computing Lab: An immersive classroom for computing learning, by PANG, Shawn; SHIM, Kyong Jin; LAU, Yi Meng; GOTTIPATI, Swapna. (2022.0). *2022 IEEE International Conference on Teaching, Assessment, and Learning for Engineering: Hong Kong, December 4-7: Proceedings*, (pp. 1-8) Piscataway, NJ: IEEE. (Published)

Gamified online industry learning platform for teaching of foundational computing skills, by LAU, Yi Meng; BARROS, Rafael J.; GOTTIPATI, Swapna; SHIM, Kyong Jin. (2022.0). *2022 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE): Hong Kong, China, December 4-7: Proceedings*, (pp. 112-119) Piscataway, NJ: IEEE. <https://doi.org/10.1109/TALE54877.2022.00026> (Published)

Investigating Bloom's cognitive skills in foundation and advanced programming courses from students' discussions, by LIM, Joel J. W.; GOTTIPATI, Swapna; SHIM, Kyong Jin. (2022.0). *2022 30th International Conference on Computers in Education: Kuala Lumpur, November 28 - December 2: Proceedings*, (pp. 1-6) Kuala Lumpur: Asia-Pacific Society for Computers in Education. (Published)

XSS for the masses: Integrating security in a web programming course using a security scanner, by SHAR, Lwin Khin; POSKITT, Christopher M.; SHIM, Kyong Jin; WONG, Li Ying Leonard. (2022.0). *ITiCSE 2022: Proceedings of the 27th ACM Conference on Innovation and Technology in Computer Science Education, Dublin, July 8-13*, (pp. 463-469) New York: ACM. <https://doi.org/10.1145/3502718.3524795> (Published)

Coders Assembly: Peer assisted learning model for freshman programming courses, by SHIM, Kyong Jin; GOTTIPATI, Swapna; SHANKARARAMAN, Venky. (2022.0). *2022 IEEE Global Engineering Education Conference (EDUCON): Tunisia, March 28-31: Proceedings*, (pp. 1128-1134) Piscataway, NJ: IEEE. <https://doi.org/10.1109/EDUCON52537.2022.9766798> (Published)

Do sequels outperform or disappoint? Insights from an analysis of Amazon echo consumer reviews, by SHIM, Kyong Jin; LO, Siaw Ling; LIEW, Su Yee. (2022.0). *2022 55th Hawaii International Conference on System Sciences HICSS: Virtual, January 4-7: Proceedings*, (pp. 2950-2959) Los Alamitos, CA: IEEE Computer Society. <https://doi.org/10.24251/HICSS.2022.364> (Published)

Mind the gap: Reimagining an interactive programming course for the synchronous hybrid classroom, by POSKITT, Christopher. M.; SHIM, Kyong Jin; LAU, Yi Meng; ONG, Hong Seng. (2022.0). *Proceedings of the 55th Hawaii International Conference on System Sciences (HICSS-55), Virtual Conference, 2022 January 4-7*, (pp. 931-940) Virtual Conference: <http://doi.org/10.24251/HICSS.2022.115> (Published)

Integration of information technology certifications into undergraduate computing curriculum, by OUH, Eng Lieh; SHIM, Kyong Jin. (2021.0). *2021 IEEE Frontiers in Education Conference (FIE), Lincoln, Nebraska USA: IEEE*. <http://doi.org/10.1109/FIE49875.2021.9637266> (Published)

Profiling student learning from Q&A interactions in online discussion forums, by ONG, De Lin; SHIM, Kyong Jin; GOTTIPATI, Swapna. (2021.0). *Proceedings of the 29th International Conference on Computers in Education, ICCE 2021, Thailand, November 22-26*, (pp. 251-260) Thailand: ICCE. (Published)

Flip & slack: Active flipped classroom learning with collaborative slack interactions, by SHIM, Kyong Jin; GOTTIPATI, Swapna; LAU, Yi Meng. (2021.0). *Proceedings of the 29th International Conference on Computers in Education (ICCE 2021), Virtual Conference, November 22-26*, (pp. 121-131) Virtual Conference: Asia-Pacific Society for Computers in Education. (Published)

Design and supervision model of group projects for active learning, by LAU, Yi Meng; SHIM, Kyong Jin; GOTTIPATI, Swapna. (2021.0). *2021 IEEE Frontiers in Education Conference (FIE): Lincoln, NE, October 13-16: Proceedings*, (pp. 1-9) Piscataway, NJ: IEEE. <https://doi.org/10.1109/FIE49875.2021.9637162> (Published)

Integrated discourse analysis & learning skills framework for class conversations, by TAN, Devyn Wei Hung; GOTTIPATI, Swapna; SHIM, Kyong Jin; SHANKARARAMAN, Venky. (2021.0). *Proceedings of 2021 Frontiers in Education (FIE), Lincoln, Nebraska, October 13-16*, (pp. 1-9) Lincoln, NE, USA: IEEE. (Published)

Mining informal and short weekly student self-reflections for improving student learning experience, by GOTTIPATI, Swapna; BARROS, Rafael; SHIM, Kyong Jin. (2021.0). *Proceedings of the 27th Americas Conference on Information Systems (AMCIS) 2021, Virtual Conference, August 9-13*, (pp. 1-10) Virtual Conference: AIS. (Published)

Information systems business analytics curriculum: Competencies from National Infocomm skills model and job listings, by GOTTIPATI, Swapna; SHANKARARAMAN, Venky; SHIM, Kyong Jin; YIP, Chan Yuen. (2021.0). *Proceedings of AMCIS 2021: Digital Innovation and Entrepreneurship, Virtual Conference, August 9-13, Virtual: AMCIS*. [https://aisel.aisnet.org/amcis2021/is\\_education/sig\\_education/7](https://aisel.aisnet.org/amcis2021/is_education/sig_education/7) (Published)

Integrated framework for developing instructional videos for foundational computing courses, by SHIM, Kyong Jin; GOTTIPATI, Swapna; LAU, Yi Meng. (2021.0). *Proceedings of the 25th Pacific Asia Conference on Information Systems (PACIS), Dubai, 2021 July 12-14*, (pp. 1-14) Dubai, UAE: AIS. (Published)

Integration of professional certifications with information systems business analytics track curriculum, by SHIM, Kyong Jin; GOTTIPATI, Swapna; LAU, Yi Meng. (2021.0). *2021 IEEE Global Engineering Education Conference (EDUCON): Vienna, Austria, April 21-23: Proceedings*, (pp. 1337-1344) Piscataway, NJ: IEEE. <https://doi.org/10.1109/EDUCON46332.2021.9453976> (Published)

Glassdoor job description analytics: Analyzing data science professional roles and skills, by GOTTIPATI, Swapna; SHIM, Kyong Jin; SAHOO, Sarthak. (2021.0). *2021 IEEE Global Engineering Education Conference (EDUCON): April 21-23, Virtual: Proceedings*, (pp. 1329-1336) Piscataway, NJ: IEEE. <https://doi.org/10.1109/EDUCON46332.2021.9453931> (Published)

Analyzing tweets on new norm: Work from home during COVID-19 outbreak, by GOTTIPATI, Swapna; SHIM, Kyong Jin; TEO, Hui Hian; NITYANAND, Karthik; SHIVAM, Shreyansh. (2021.0). *2021 11th IEEE Annual Computing and Communication Workshop and Conference: January 27-30, Virtual: Proceedings*, (pp. 500-507) Piscataway, NJ: IEEE. <https://doi.org/10.1109/CCWC51732.2021.9375936> (Published)

A social network analysis of jobs and skills, by LEE, Derrick Ming Yang; ANG, Dion Wei Xuan; PUA, Grace Mei Ching; NG, Lee Ning; PURBOWO, Sharon; CHOY, Eugene Wen Jia; SHIM, Kyong Jin. (2020.0). *2020 IEEE International Conference on Big Data: Virtual conference, December 10-13: Proceedings*, (pp. 5747-5749) Piscataway, NJ: IEEE. <https://doi.org/10.1109/BigData50022.2020.9378130> (Published)

Digital social listening on conversations about sexual harassment, by SIM, Xuesi; CHANG, Ern Rae; ONG, Yu Xiang; YEO, Jie Ying; YAN, Christine Bai Shuang; CHOY, Eugene Wen Jia; SHIM, Kyong Jin. (2020.0). *2020 IEEE International Conference on Big Data: Virtual conference, December 10-13: Proceedings*, (pp. 5825-5827) Piscataway, NJ: IEEE. <https://doi.org/10.1109/BigData50022.2020.9377944> (Published)

Social media analytics: A case study of Singapore General Election 2020, by KHOO, Sebastian Zhi Tao; HO, Leong Hock; LEE, Ee Hong; GOH, Danston Kheng Boon; ZHANG, Zehao; NG, Swee Hong; QI, Haodi; SHIM, Kyong Jin. (2020.0). *2020 IEEE International Conference on Big Data: Virtual, December 10-13: Proceedings*, (pp. 5730-5732) Piscataway, NJ: IEEE. <https://doi.org/10.1109/BigData50022.2020.9378358> (Published)

Renewal of an information systems curriculum to support career based tracks: A case study, by GOTTIPATI, Swapna; SHANKARARAMAN, Venky; SHIM, Kyong Jin. (2020.0). *Proceedings of 2020 SIGED International Conference on Information Systems Education and Research, Virtual, December 12-13*, (pp. 1-13) Virtual: Association for Information Systems. <https://aisel.aisnet.org/siged2020/21/> (Published)

Exploring the impact of COVID-19 on aviation industry: A text mining approach, by GOTTIPATI, Swapna; SHIM, Kyong Jin; JIANG, Angeline Weiling; LEE, Sheng Wei Andre Justin. (2020.0). *2020 11th IEEE Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), Canada, 4-7 November: Proceedings*, (pp. 1-8) Piscataway, NJ: IEEE. <https://doi.org/10.1109/IEMCON51383.2020.9284858> (Published)

An IoT-driven smart cafe solution for human traffic management, by PRITHIVIRAJAN, Maruthi; SHIM, Kyong Jin. (2019.0). *2019 IEEE International Conference on Big Data (Big Data): Los Angeles, CA, December 9-12: Proceedings*, (pp. 6186-6188) Los Alamitos, CA: IEEE Computer Society. <https://doi.org/10.1109/BigData47090.2019.9005489> (Published)

Tracking political events in social media: A case study of Hong Kong protests, by QI, Haodi; JIANG, Hanyu; BU, Wende; ZHANG, Chengzi; SHIM, Kyong Jin. (2019.0). *2019 IEEE International Conference on Big Data: Los Angeles, December 9-12: Proceedings*, (pp. 6192-6194) Piscataway, NJ: IEEE. <https://doi.org/10.1109/BigData47090.2019.9006462> (Published)

Happy toilet: A social analytics approach to the study of public toilet cleanliness, by CHOY, Eugene W. J.; HO, Winston M. K.; LI, Xiaohang; VERMA, Ragini; SIM, Li J.; SHIM, Kyong Jin. (2019.0). *2019 IEEE International Conference on Big Data, Los Angeles, CA, December 9-12: Proceedings*, (pp. 6024-6026) Los Alamitos, CA: IEEE Computer Society. <https://doi.org/10.1109/BigData47090.2019.9006125> (Published)

A cloud-based data gathering and processing system for intelligent demand forecasting, by TAY, Colin K. L.; SHIM, Kyong Jin. (2018.0). *2018 IEEE International Conference on Big Data (Big Data): Seattle, WA, December 10-13: Proceedings*, (pp. 5451-5453) Piscataway, NJ: IEEE. <https://doi.org/10.1109/BigData.2018.8622546> (Published)

Data mining approach to the identification of at-risk students, by HO, Li Chin; SHIM, Jin Kyong. (2018.0). *2018 IEEE International Conference on Big Data (Big Data): Seattle, December 10-13: Proceedings*, (pp. 5333-5335) Piscataway, NJ: IEEE. <https://doi.org/10.1109/BigData.2018.8622495> (Published)

Data mining approach to the detection of suicide in social media: A case study of Singapore, by SEAH, Jane H. K.; SHIM, Kyong Jin. (2018.0). *2018 IEEE International Conference on Big Data (Big Data): Seattle, WA, December 10-13: Proceedings*, (pp. 5442-5444) Piscataway, NJ: IEEE. <https://doi.org/10.1109/BigData.2018.8622528> (Published)

CareerMapper: An automated resume evaluation tool, by LAI, Vivian; SHIM, Kyong Jin; OENTARYO, Richard Jayadi; PRASETYO, Philips Kokoh; VU, Casey; LIM, Ee Peng; LO, David. (2016.0). *BigData 2016: Proceedings of the 4th IEEE International Conference on Big Data: Washington DC, December 5-8*, (pp. 4005-4007) Piscataway, NJ: IEEE. <https://doi.org/10.1109/BigData.2016.7841091> (Published)

Analysis of education and job trends in data science, by LAI, V.; SHIM, K. J.; PRITHIVIRAJAN, M.. (2016.0). *Proceedings of the 9th annual International Conference of Education, Research and Innovation Seville, Spain, 2016 November 14-16*, Seville, Spain: IATED. <https://doi.org/10.21125/iceri.2016> (Published)

Analysis of student performance and student participation in online discussions, by SHIM, K. J.; LAI, V.; PRITHIVIRAJAN, M.. (2016.0). *Proceedings of the 9th annual International Conference of Education, Research and Innovation, Seville, Spain, 2016 November 14-16*, Seville, Spain: IATED. <https://doi.org/10.21125/iceri.2016> (Published)

Social network analysis of student project teams, by Lai, V.; SHIM, Kyong Jin; Prithivirajan, M.. (2016.0). *INTED 2016 Proceedings: 10th International Technology, Education and Development Conference, Valencia, Spain. 7-9 March*, (pp. 4699-4705) Valencia: IATED. <https://doi.org/10.21125/inted.2016.2168> (Published)

Analysis of aspects and star ratings in consumer reviews, by PRITHIVIRAJAN, Maruthi; LAI, Vivian; SHIM, Kyong Jin. (2015.0). *ISAAC 2015: International Symposium on Advanced and Applied Convergence: November 12-15, Seoul: Proceedings*, (pp. 32-38) Seoul: Institute of Internet, Broadcasting and Communication. (Published)

Analysis of Star Ratings in Consumer Reviews: A Case Study of Yelp, by Prithivirajan, M; Lai, V; SHIM, Kyong Jin; Koo, P.S. (2015.0). *2015 IEEE International Conference on Big Data (Big Data)*, (pp. 2954-2956) IEEE International Conference on Big Data (IEEE BigData 2015): IEEE. (Published)

Efficient extraction of JSON information in SAS using the SCANOVER function, by CHOY, Murphy; SHIM, Kyong Jin. (2013.0). *Proceedings of 2013 SAS Global Forum, San Francisco, April 28 - May 1*, (pp. 1-6) San Francisco, CA, USA: (Published)

K-Pop live: Social networking & language learning platform, by CHUA, Thomas, ONG, Chin Leng, PNG, Kian Ming, LAU, Aloysius, TOH, Houston, ZHU, Feida, SHIM, Kyong Jin, LIM, Ee-Peng. (2013.0). *Proceedings of iConference 2013, Fort Worth, Texas, February 12-15*, (pp. 1081-1085) Fort Worth, TX: <https://doi.org/10.9776/13523> (Published)

The predictive value of networks: Using social network information to improve the performance of age prediction algorithms for massively multiplayer online games, by WELLES, Brooke F.; KAPOOR, Komal; RATAN, Rabindra; KENNEDY, Tracy; SHIM, Kyong Jin; CONTRACTOR, Noshir; SRIVASTAVA, Jaideep; WILLIAMS, Dmitri. (2012.0). *Sunbelt XXXII: Abstracts of the Sunbelt Social Network Conference of the International Network for Social Network Analysis, Redondo Beach, CA, June 13-18*, (pp. 127-127) Marietta, GA: INSNA. (Published)

Analyzing network motif signatures in large social network data, by PATHAK, N.; AHMAD, M. A., SHIM, K. J.; SRIVASTAVA, J.. (2012.0). *Proceedings of the International Sunbelt Social Network Conference 32, International Network for Social Network Analysis, Redondo Beach, California, USA, Redondo Beach, CA, USA*: (Published)

An Exploratory Study of Player and Team Performance in Multiplayer First-Person-Shooter Games, by SHIM, Kyong Jin; HSU, K. W.; Damania, S.; Delong, C.; Srivastava, J.. (2011.0). *2011 IEEE International Conference on Privacy, Security, Risk and Trust and IEEE International Conference on Social Computing*

: *proceedings, PASSAT/SocialCom 2011 : 9-11 October 2011, Boston, Massachusetts, USA.*, Los Alamitos, Calif.: IEEE. <http://dx.doi.org/10.1109/PASSAT/SocialCom.2011.155> (Published)

An Exploratory Study of Player Performance, Motivation and Enjoyment in Massively Multiplayer Online Role-Playing Games, by SHIM, Kyong Jin; HSU, K. W.; Srivastava, J.. (2011.0). *Proceedings of the IEEE Social Computing (SocialCom-11)*, Boston, Massachusetts: IEEE.

<http://dx.doi.org/10.1109/PASSAT/SocialCom.2011.156> (Published)

Effects of mentoring on player performance in massively multiplayer online role-playing games (MMORPGs), by SHIM, Kyong Jin; HSU, Kuo-Wei; SRIVASTAVA, Jaideep. (2011.0). *ASONAM 2011: Proceedings, International Conference on Advances in Social Network Analysis and Mining: 25-27 July, Kaohsiung, Taiwan*, (pp. 561-562) Los Alamitos, CA: IEEE Computer Society.

<https://doi.org/10.1109/ASONAM.2011.115> (Published)

Modeling Player Performance in Massively Multiplayer Online Role-Playing Games: The Effects of Diversity in Mentoring Network, by SHIM, Kyong Jin; HSU, K. W.; Srivastava, J.. (2011.0). *ASONAM 2011 : Proceedings, 2011 International Conference on Advances in Social Network Analysis and Mining : 25-27 July 2011, Kaohsiung, Taiwan.*, Los Alamitos, Calif.: IEEE. <http://dx.doi.org/10.1109/ASONAM.2011.113> (Published)

TeamSkill: Modeling Team Chemistry in Online Multi-Player Games, by Delong, Colin; Pathak, Nishith; Erickson, Kendrick; Perrino, Eric; SHIM, Kyong Jin; Srivastava, Jaideep. (2011.0). *Advances in Knowledge Discovery and Data Mining: 15th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2011)*, (pp. 519-531) Shenzhen, China: Springer Verlag.

[http://dx.doi.org/10.1007/978-3-642-20847-8\\_43](http://dx.doi.org/10.1007/978-3-642-20847-8_43) (Published)

Evaluation of protein backbone alphabets : Using predicted local structure for fold recognition, by SHIM, Kyong Jin. (2010.0). *10th IEEE International Conference on Data Mining Workshops ICDMW 2010: Proceedings, Sydney, Australia, 14-17 December*, (pp. 755-762) Los Alamitos, CA: IEEE.

<https://doi.ieeecomputersociety.org/10.1109/ICDMW.2010.168> (Published)

Sequence alignment based analysis of player behavior in massively multiplayer online role-playing games (MMORPGs), by SHIM, Kyong Jin; SRIVASTAVA, Jaideep. (2010.0). *IEEE International Conference on Data Mining Workshops: ICDMW 2010, Sydney, 14 December: Proceedings*, (pp. 997-1004) Los Alamitos, CA: IEEE Computer Society. <https://doi.org/10.1109/ICDMW.2010.166> (Published)

Team performance prediction in massively multiplayer online role-playing games (MMORPGs), by SHIM, Kyong Jin; SRIVASTAVA, Jaideep . (2010.0). *SocialCom 2010: Proceedings: 2nd IEEE International Conference on Social Computing: PASSAT 2010: Minneapolis, MN, August 20-22*, (pp. 128-136) Los Alamitos, CA: IEEE Computer Society. <https://doi.org/10.1109/SocialCom.2010.27> (Published)

Behavioral Profiles of Character Types in EverQuest II, by SHIM, Kyong Jin; Srivastava, J.. (2010.0). *IEEE Symposium on Computational Intelligence and Games (CIG), 2010 : 18 - 21 Aug. 2010, IT University of Copenhagen, Denmark*, Piscataway NJ: IEEE. <http://dx.doi.org/10.1109/ITW.2010.5593356> (Published)

Player performance prediction in massively multiplayer online role-playing games (MMORPGs), by SHIM, Kyong Jin; SHARAN, Richa; SRIVASTAVA, Jaideep. (2010.0). *Advances in Knowledge Discovery and Data Mining: 14th Pacific-Asia Conference, PAKDD 2010, Hyderabad, India, June 21-24: Proceedings*, (pp. 71-80) Cham: Springer. [https://doi.org/10.1007/978-3-642-13672-6\\_8](https://doi.org/10.1007/978-3-642-13672-6_8) (Published)

Inferring player rating from performance data in massively multiplayer online role-playing games (MMORPGs), by SHIM, Kyong Jin; AHMAD, Muhammad Aurangzeb; PATHAK, Nishith; SRIVASTAVA, Jaideep. (2009.0). *2009 International Conference on Computational Science and Engineering: SocialCom, Vancouver, Canada, 29-31 August: Proceedings*, (pp. 1199-1204) Los Alamitos, CA: IEEE Computer Society. <https://doi.ieeecomputersociety.org/10.1109/CSE.2009.452> (Published)

## Conference Papers

Plugin to a healthier life: A web browser plugin for mental health monitoring, by SEAH, J. H. K.; SHIM, K. J.. (2019.0). *2019 IEEE International Conference on Big Data, Los Angeles, California, December 9-12*, Los Angeles, California. (Presented)

Listen, nudge, empower: A mobile gratitude journal application, by CHOY, E. W. J.; NG, G. H. L.; LIM, M. J. H.; SHIM, K. J.. (2019.0). *2019 IEEE International Conference on Big Data, Los Angeles, California, December 9-12*, Los Angeles, California. (Presented)

How does fake news spread: Raising awareness & educating the public with a simulation tool, by LEE, C. L.; WONG, J.-D. J. J.; LIM, Z. Y.; THO, B. S. T.; KWEK, S. S. W.; SHIM, K. J.. (2019.0). *2019 IEEE International Conference on Big Data, Los Angeles, California, December 9-12*, Los Angeles, California. (Presented)

Scalable E-Learning platform for spreadsheet modeling, by Lai, V; Shim, K. J.; Prithivirajan, M.. (2016.0). *10th Annual International Technology Education and Development Conference (INTED2016)*, Valencia, Spain. [https://iated.org/concrete3/view\\_abstract.php?paper\\_id=49598](https://iated.org/concrete3/view_abstract.php?paper_id=49598) (Presented)

### Magazine Articles

Player and Team Performance in EverQuest II and Halo 3, by SHIM, Kyong Jin; Damania, S.; Delong, C.; Srivastava, J.. (2011, September). *IEEE Potentials*, 30 (5), 21-26. <http://dx.doi.org/10.1109/MPOT.2011.941083> (Published)

### Newspaper Articles

Helping SMEs Understand Consumers and Competitors, by SHIM, Kyong Jin. (2016, March 17). *Lianhe Zaobao* [http://www.smu.edu.sg/sites/default/files/smu/news\\_room/LH2B\\_20160317\\_1.pdf](http://www.smu.edu.sg/sites/default/files/smu/news_room/LH2B_20160317_1.pdf) (Published)

Leveraging on Social Media to Tap New Business Potential, by SHIM, Kyong Jin. (2012, December 18). *Business Times (Singapore)* [http://www.smu.edu.sg/sites/default/files/smu/news\\_room/smu\\_in\\_the\\_news/2013/sources/BT\\_20121218\\_1.pdf](http://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2013/sources/BT_20121218_1.pdf) (Published)

### **Other Outputs and Contributions**

#### Reports

*Evaluation of protein backbone alphabets: Using predicted local structure for fold recognition* by SHIM, Kyong Jin. (2010). (Published)

*Prediction of protein subcellular localization: A machine learning approach* by SHIM, Kyong Jin. (2010). (Published)

*Data mining based predictive models for overall health indices* by RAJKUMAR, Ridhima; SHIM, Kyong Jin; SRIVASTAVA, Jaideep. (2010). (Published)

*Player performance prediction in massively multiplayer online role-playing games (MMORPGs)* by SHIM, Kyong Jin; SHARAN, Richa; SRIVASTAVA, Jaideep. (2010). (Published)

### **Research Grants**

#### Singapore Management University

PresentationPro: Improving Public Speaking Skills through AI-Driven Virtual Reality Interactions, Tertiary Education Research Fund (TRF), Ministry of Education (MOE) , PI (Project Level): Kyong Jin SHIM , Co-PI (Project Level): Swapna GOTTIPATI, Rajesh Krishna BALAN, DAI Bing Tian, 2024, S\$144,302.2

DHL-SMU Analytics Lab, DHL , PI (Project Level): Kyong Jin SHIM, 2016, S\$500,000

Leveraging Mobile Sensing to Provide Early Detection of Meltdowns in Children with Autism, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Rajesh Krishna BALAN, 2023, S\$120,000

New global shipping patterns: synchronized delivery in global supply chains, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Amanda JAKOBSSON , Co-PI (Project Level): Kyong Jin SHIM, 2017, S\$23,950

### Other Institutions



PresentationPro: Improving Public Speaking Skills through AI-Driven Virtual Reality Interactions, MOE TRF, MOE Tertiary Education Research Fund , PI (Programme Level): Kyong Jin SHIM, PI (Project Level): Kyong Jin SHIM, Co-PI (Project Level): Swapna GOTTIPATI, Rajesh Krishna BALAN, DAI Bing Tian, 2024, SGD144,302.2

Gen-AI Mentor for IS project Experience: Enhancing Proposal Quality , ESG, SMU Centre for Teaching excellence PI (Project Level): Kiruthika RAMANATHAN, Co-PI (Project Level): Rafael J. BARROS, Kyong Jin SHIM, 2024, SGD9,000

Leveraging Mobile Sensing to Provide Early Detection of Meltdowns in Children with Autism, Academic Research Fund (AcRF) Tier 1, (MOE), Academic Research Fund (AcRF) Tier 1, (MOE) PI (Project Level): Rajesh Krishna BALAN, 2023, SGD120,000

XR-Enabled Immersive Learning for Computing Courses, SMU Educational Research Fellowship, Singapore Management University PI (Project Level): Kyong Jin SHIM, 2022

Q&A Monkey: Platform for Personalized Learning and Improved Teaching Process, Technology-enabled Learning Grant, Singapore Management University Centre for Teaching Excellence (CTE) PI (Project Level): Kyong Jin SHIM, Co-PI (Project Level): Swapna GOTTIPATI, 2021

## TEACHING

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### Teaching Areas

Social Analytics & Applications  
 Web Application Development I  
 Web Application Development II  
 Guided Research in Computing  
 Guided Research in Computer Science

### Courses Taught

#### Singapore Management University

##### Undergraduate Programmes :

Big Data Architecture  
 Community Based Projects in the Real World  
 IS/SMT/C&L Project Experience (Applications)  
 Social Analytics and Applications  
 Virtual Reality for Business  
 Web Application Development I  
 Web Application Development II

##### Postgraduate Professional Programmes :

Capstone Project - Data Science and Engineering  
 Capstone Project - Software and Cyber-Physical Systems

## OTHER ACADEMIC AND PROFESSIONAL ACTIVITIES

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### Media Contributions and Citations

Relieving a fear of public speaking, SMU Newsroom, 27 May 2024  
<https://research.smu.edu.sg/news/2024/may/relieving-fear-public-speaking>

Virtual Reality in the Classroom – Creating a VR Computing Lab, SMU Research Podcast, 26 Jun 2023  
<https://research.smu.edu.sg/news/2023/jun/26/virtual-reality-classroom-creating-vr-computing-lab>

Strengthening students' programming skills through peer support and personalised help, SMU Highlights, 06 Sep 2021  
<https://news.smu.edu.sg/news/2021/09/06/strengthening-students-programming-skills-through-peer-support-and-personalised>

Educator and Administrator Testimonials, AWS Academy, AWS Academy Featured Educator, 16 Oct 2020  
<https://aws.amazon.com/training/awsacademy/>

Using mobile technology to steer moods to the bright side, Research@SMU, 27 Aug 2019  
<https://research.smu.edu.sg/news/2019/aug/27/using-mobile-technology-steer-moods-bright-side>

"Insights from Thought Leaders" on the topic of "Social Sensing and Analytics", SMU Podcast, 01 Jan 2016

## UNIVERSITY SERVICE

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### Singapore Management University

Faculty supervisor to Ms. LIAO Zixin, MSc Computing, Dec 2025 - Present

Faculty supervisor to Mr. WANG Mingyuan, MSc Computing, Dec 2025 - Present

Evaluator, Centre for Teaching Excellence - Faculty Teaching Forum - Microteaching, Nov 2025 - Present

Guest Speaker, Centre for Teaching Excellence - Faculty Teaching Forum - Heart From Our Faculty, Nov 2025 - Present

Evaluator for Ms. K. A. Nipuni Hansika, MSc Computing, Nov 2025 - Present

Judge, SCIS Tech Series Hackathon 2025, Sep 2025 - Present

Evaluator, Centre for Teaching Excellence - Faculty Teaching Forum - Microteaching, Aug 2025 - Present

Judge, SCIS .Hack HEAP, Jul 2025 - Present

Judge, SMUBIA Datathon 2025, Feb 2025 - Present

Faculty supervisor to Mr. Keith CHIANG, MSc Computing, Jan 2025 - Present

Academic Reviewer, PCE Quality Assurance Academic Reviewer in the Office of the Provost, Jan 2025 - Present

Judge, SCIS Ellipsis Tech Series Hackathon 2024, Sep 2024 - Present

SMU-X Academic Champion & Mentor, SMU-X Academic Champion & Mentor, Aug 2024 - Present

Guest Speaker, Centre for Teaching Excellence New Faculty Training, Jul 2024 - Aug 2024

Capstone evaluation committee member for SIN Jean Min, MSc Computing, Jul 2024 - Present

Exam Reviewer, SMU Industry Practice Master (IPM), Jul 2024 - Present  
 Faculty supervisor to Mr. LOW Kim Wan, MSc Computing, Jan 2024 - Dec 2024  
 Faculty supervisor to Ms. ONG Zhen Zhen, MSc Computing, Jan 2024 - Dec 2024  
 Panelist, Industry Project-based Experiential Learning (INDEX), Oct 2023  
 Judge, Google Ignite hackathon, Oct 2023  
 Judge, Ellipsis Tech Series Hackathon, Aug 2023  
 Keynote Speaker and Panelist, SMU-X Technology Community of Practice (COP), Aug 2023  
 Speaker, SCIS Outreach, Feb 2023  
 Info Session Speaker, SCIS Outreach, Dec 2022  
 Faculty Mentor, Ellipsis SCIS Day, Oct 2022  
 Judge, Women-in-Tech Google Ignite Finale, Oct 2022  
 Judge, Ellipsis Goldman Sachs Hackathon, Aug 2022  
 Faculty Mentor, Centre for Teaching Excellence, Aug 2022  
 Guest media appearance, Office of Undergraduate Admissions, May 2022  
 Reviewer, Centre for Teaching Excellence, May 2022  
 Workshop Organizer, Center for Teaching Excellence, Apr 2022 - Present  
 Workshop Speaker, SMU Open House - CSS Workshop, Feb 2022  
 Attendee Commencement, Faculty, Dec 2021  
 Workshop Facilitator, SCIS Outreach-Social Media Analytics Workshop, Dec 2021  
 Microteaching Reviewer, CTE Faculty Teaching Forum, Dec 2021  
 Business Analytics Track Coordinator, Information Systems Program, Jul 2021 - Present  
 Info Session Speaker, SCIS Outreach, May 2021  
 Faculty Mentor, Women-in-Technology, May 2021 - Present  
 Task Force Member, Futures Thinking Group, Jun 2020 - Present  
 Faculty Mentor, SIS Outreach - Scholars' Day, May 2020  
 Faculty Advisor, Ellipsis, May 2020 - Present  
 Faculty Advisor, Coders Assembly, May 2020 - Present  
 Faculty Mentor, SIS Outreach - Computer Science Discovery Day, Apr 2020  
 Panelist, SIS Outreach - Virtual Open House, Feb 2020  
 Panelist, SIS Outreach - Women in Tech, Jan 2020  
 Workshop Facilitator, SIS Outreach - Scholars' Event, May 2019  
 Panelist, SIS Outreach - Women in Tech, Jan 2019  
 Committee Member, Scholarship Interviews Committee, Jan 2019 - Present  
 Speaker, SIS Outreach - ExploreSIS, Dec 2018  
 Emcee, SIS Day, Oct 2018  
 Track Coordinator, Business Analytics Track, Jul 2018 - Jun 2019

Workshop facilitator, SIS Outreach, Apr 2018  
 SMU CPOC (Central Point of Contact), AWS-SMU Partnership (AWS Academy), Feb 2018 - Present  
 Project lead, SIS Connect, Jan 2018 - Present  
 Workshop facilitator, SIS Outreach, Aug 2017  
 Workshop Organizer, SMU Discovery Day, Apr 2017  
 Workshop facilitator, SIS Outreach, Jan 2017  
 Faculty Advisor, APEX Business-IT Global Case Challenge, May 2015 - Jun 2016

## EXTERNAL SERVICE – PROFESSIONAL

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Presenter Keynote Address, National Technology Enhanced Learning Conference (NTEL) 2025, 2025 - Present  
 Reviewer Conference Paper, IEEE EDUCON 2025, 2025  
 Reviewer, Demo, SIGGRAPH Asia 2024, 2024 - Present  
 Reviewer Conference Paper, IEEE TALE 2024, 2024 - Present  
 Presenter Keynote Address, XRPERIENCE at BrainHack 2024, 2024 - Present  
 Reviewer Conference Paper, IEEE EDUCON 2024, 2024 - Present  
 Panelist, Amazon Web Services, 2023  
 Guest Speaker, 2022 NTEL - National Technology Enhanced Learning Conference, 2022  
 Reviewer Ad Hoc Reviewer, The ACM Special Interest Group on Management of Data (SIGMOD), 2022  
 Panelist, AWS Summit ASEAN 2022, Amazon Web Services, 2022  
 Guest Speaker, AWS Academy Round table, AWS Academy, 2022  
 Reviewer Conference Paper, The Hawaii International Conference on System Sciences (HICSS), 2022  
 Reviewer Conference Paper, ICCE2022: 30th International Conference on Computers in Education, 2022  
 Guest Speaker, AWS Summit Online ASEAN 2022, 2022  
 Committee Chair, Competition Committee, IEEE Global Engineering Education Conference (EDUCON) 2022, 2022  
 Reviewer Conference Paper, IEEE Global Engineering Education Conference (EDUCON) 2022, 2022  
 Panelist, Women Leaders Conference, 2022 - Present  
 Presenter Keynote Address, Amazon Web Services, 2021  
 Panelist, EDUtech Asia 2021 & Amazon Web Services, 2021  
 Reviewer Conference Paper, Technical Program Committee, IEEE 12th Annual Information Technology, Electronics and Mobile Communication Conference (IEEE IEMCON 2021), 2021  
 Judge, Google Ignite, 2021  
 Reviewer Conference Paper, Frontiers in Education (FIE), 2021  
 Session Chair, 2021 Pacific Asia Conference on Information Systems, 2021  
 Session Chair, 2021 IEEE Global Engineering Education Conference (EDUCON), 2021

Reviewer Journal Article, Social Science Computer Review, 2020 - Present  
External Assessor, Singapore University of Social Sciences, 2020 - Present  
Reviewer Journal Article, Social Network Analysis and Mining, 2020 - Present  
Guest Speaker, Amazon Web Services, 2019

#### **EXTERNAL SERVICE – PUBLIC SECTOR AND COMMUNITY SERVICE**

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Judge, HeartCode, 2022 - Present  
Judge, HeartCode, 2021  
Judge, Kode It, Sparkies!, 2018  
Committee Member, Organizing Committee, Code for Science, 2012