




International Workshop on Heterogeneous Edge Computing for Embedded System (HEC)

Time	
2022/10/12 9:15-12:15	
Website	
https://hec-esweek.github.io	
Way to access online meeting room	
Gather Town: https://app.gather.town/app/Kp6jAbSnoJsessor/ESWEEK_2022	
Zoom room: https://us06web.zoom.us/j/87159148549?pwd=MTEwU1BIYzF5L1I1Wkc0TmdYY2kwdz09	
Program	
9:15-9:45	Sangheon Pack , Korea University Title: Multi-Access Edge Computing: Ecosystem and Federation
9:45-10:15	Wei Yan , ICT, Chinese Academy of Sciences Title: Trusted Execution Environment on Heterogeneous Edge Computing
10:15-10:45	Bo Yu , PerceptIn Title: Building Computing Systems for Autonomous Vehicles
10:45-11:15	Quan Chen , Shanghai Jiao Tong University Title: Efficient Microservice Scheduling in Cloud Edge Continuum
11:15-11:45	Guanglin Zhang , Donghua University Title: Competitive Online Stay-or-Switch Algorithms With Minimum Commitment and Switching Cost
11:45-12:15	Shaohua Wan , University of Electronic Science and Technology of China Title: Some Thoughts on Medical Imaging Applications of Deep Learning: Out-of-Distribution Detection, Model Compression, and Explainable AI

Speakers	
	<p>Sangheon Pack received B.S. and Ph.D. degrees from Seoul National University, Seoul, Korea, in 2000 and 2005, respectively, both in computer engineering. In 2007, he joined the faculty of Korea University, Seoul, Korea, where he is currently a Professor in the School of Electrical Engineering. From 2005 to 2006, he was a Postdoctoral Fellow with the Broadband Communications Research Group, University of Waterloo, Waterloo, ON, Canada. He was the recipient of the IEEE/Institute of Electronics and Information Engineers (IEIE) Joint Award for IT Young Engineers Award 2017, Korean Institute of Information Scientists and Engineers (KIISE) Young Information Scientist Award 2017, Korea University TechnoComplex (KUTC) Crimson Professor 2015, Korean Institute of Communications and Information Sciences (KICS) Haedong Young Scholar Award 2013, LG Yonam Foundation Overseas Research Professor Program in 2012, and IEEE ComSoc APB Outstanding Young Researcher Award in 2009. He served as a TPC vicechair for information systems of IEEE WCNC 2020, a track chair of IEEE VTC 2020-Fall/2010-Fall and IEEE CCNC 2019, a TPC chair of IEEE/IEIE ICCEAsia 2018/2020, EAI Qshine 2016, and ICOIN 2020, a publication cochair of IEEE INFOCOM 2014 and ACM MobiHoc 2015, a symposium chair of IEEE WCSP 2013, a TPC vice-chair of ICOIN 2013, and a publicity co-chair of IEEE SECON 2012. He is an editor of IEEE Internet of Things (IoT) Journal, Journal of Communications Networks (JCN), IET Communications, and he is a guest editor of IEEE Transactions on Emerging Topics in Computing (TETC) and IEEE Transactions on Network Science and Engineering (TNSE). He is a senior member of IEEE. His research interests include softwarized networking (SDN/NFV), 5G/6G mobile core networks, mobile edge computing/programmable data plane, and vehicular networking.</p>
	<p>Wei Yan received the master's degree in Electronic Engineering at the University of Chinese Academy of Sciences in 2014 and Ph.D. degree in Electrical and Computer Engineering at the University of Connecticut in 2018. After being a postdoctoral researcher at Washington University in St. Louis and assistant professor at Clarkson University, he is currently an associate professor at Institute of Computing Technology, Chinese Academy of Sciences. His research interests include FPGA-based digital design, hardware and embedded security, fault tolerant algorithm, blockchain, and solid-state devices.</p>
	<p>Bo Yu received the B.S. degree in electronic technology and science from Tianjin University, Tianjin, China, in 2006, and the Ph.D. degree from the Institute of Microelectronics, Tsinghua University, Beijing, China, in 2012. He is currently the CTO of PerceptIn, a company focusing on providing visual perception solutions for robotics and autonomous driving. His current research interests include algorithm and systems for robotics and autonomous vehicles. Dr. Yu is a Founding Member of the IEEE Special Technical Community on Autonomous Driving. He is a senior member of IEEE.</p>

	<p>Quan Chen is a professor at the department of computer science and engineering, Shanghai Jiao Tong University. His main research interest lies in computer systems, computer architectures and cloud computing. He has published over 100 peer-reviewed papers in leading venues related to these areas, including ASPLOS, ATC, ISCA, SC, ICS, TPDS, TC, et, al. He is the recipient of the NSFC career award, and IEEE TCSC Award for Excellence (Early career researcher). He is awarded the 2019 Alibaba DAMO Academy Young Fellow. He is on the editorial board of Parallel Computing, JCST, and FCS.</p>
	<p>Guanglin Zhang (Member, IEEE) received the B.S. degree in applied mathematics from Shandong Normal University, Jinan, China, in 2003, the M.S. degree in operational research and cybernetics from Shanghai University, Shanghai, China, in 2006, and the Ph.D. degree in information and communication engineering from Shanghai Jiao Tong University, Shanghai, in 2012. From 2013 to 2014, he was a Post-Doctoral Research Associate with the Institute of Network Coding, The Chinese University of Hong Kong. He is currently a Professor and the Vice Dean with the College of Information Science and Technology, Donghua University, Shanghai. His research interests include online algorithms, capacity scaling of wireless networks, vehicular networks, smart microgrids, and mobile edge computing. He has been the Local Arrangement Co-Chair of ACM TURC 2017 and 2019 and the Vice Technical Program Committees Co-Chair of ACM TURC 2018 and 2021. He is an Editor on the Editorial Board of IEEE/CIC CHINA COMMUNICATIONS.</p>
	<p>Shaohua Wan received the Ph.D. degree from the School of Computer, Wuhan University in 2010. He is currently a full professor with Shenzhen Institute for Advanced Study, University of Electronic Science and Technology of China. From 2016 to 2017, he was a visiting professor at the Department of Electrical and Computer Engineering, Technical University of Munich, Germany. His main research interests include deep learning for Internet of Things. He is an author of over 200 peer-reviewed research papers and books, including over 50 IEEE/ACM Transactions papers such as TMC, TII, TITS, TOIT, TNSE, TMM, TGCN, TCSS, TOMM, TETCI, TAES, TALLIP, etc., and many top conference papers in the fields of edge intelligence. He is an associate editor in Journal of Systems Architecture and IEEE Transactions on Intelligent Transportation Systems. Over 6500 citations have been recorded to his publications and his H-index is 42 according to Google scholar. He had served as the Lead Guest Editor of IEEE Transactions on Intelligent Transportation Systems, IEEE Transactions on Industrial Informatics, ACM Transactions on Multimedia Computing Communication, and etc. He is also an ACM/IEEE senior member.</p>

General Chairs



Pei Songwen is a full professor and doctoral supervisor within the University of Shanghai for Science and Technology (USST). He is also an IEEE Senior Member, CCF distinguished member, Shanghai Pujiang talent. He won the Shanghai Science and Technology Progress Award (the first winner) in 2018, and the second prize of University of Shanghai for Science and Technology (USST) for teaching achievements (the first winner) in 2020. He once served as Deputy Director of Yangpu District Science and Technology Commission from December 2016 to August 2018, Visiting Scholar of University of California Irvine from July 2013 to August 2015. He currently is the Chairman of China Computer Federation YOCSEF Shanghai, Member of the Standing Committee of Computer Engineering and Technology, and Member of the Standing Committee of Computer Architecture, Deputy Director of Computer Architecture Special Committee of Shanghai Computer Society (SCS), Deputy Director of Pervasive Computing and Embedded Systems Special Committee of Shanghai Computer Society (SCS), etc. He is mainly engaged in research in intelligent computing, heterogeneous computing, in-depth learning and other fields, and has obtained fund support including general programs of the National Natural Science Foundation of China, Shanghai Pujiang Talents, Shanghai Natural Science Foundation, etc.



Tong Liu received her B.E. degree and Ph.D. degree in the Department of Computer Science and Engineering at the Shanghai Jiao Tong University, Shanghai, China, in 2012 and 2017 respectively. From 2013 to 2014, she worked as an intern in Microsoft Research Asia for one year. From 2015 to 2016, she was sponsored by China Scholarship Council to visit Stony Brook University for one year. Currently, she is an associate professor in the School of Computer Engineering and Science at Shanghai University, China. Her research interests include mobile crowdsensing, edge computing, reinforcement learning and federated learning. In the past five years, she has published more than 30 academic papers in IEEE Transactions on Mobile Computing (TMC), IEEE Internet of Things Journal (IoTJ), IEEE Transactions on Wireless Communications (TWC), etc. She is Deputy Director of Shanghai Engineering Research Center of Intelligent Computing System. She also serves as the vice-chairman of China Computer Federation YOCSEF Shanghai.