NEWSLETTER 2020 ISSUE 5



ANNOUNCEMENT

The 6th Youth Forum on Frontiers of Computing will take place on October 17th, 2020! This forum invites young scholars and rising stars in all computer science fields to gather at Peking University to exchange scientific discoveries and new technologies, to learn about the center and academic career at PKU, and to interact with the PKU Turing Class students. Due to the COVID-19 pandemic, this event will be held online. Speaker application opens until October 3rd, 2020. Potential faculty candidates are especially encouraged to apply. We appreciate that you help spread this message among your colleagues and your current/past PhD students, or whoever you see appropriate. For more information, please visit:

http://cfcs.pku.edu.cn/announcement/important notice/237850.htm.

FEATURED NEWS

Turing Award Laureate Manuel Blum and Prof. Lenore Blum Join PKU as the Visiting Chair Professor June 15th, 2020, PKU CFCS



Peking University's first "Cloud Appointment" ceremony was held at Courtyard No.5, Jingyuan with President Hao Ping awarding certificates of visiting chair professor to Prof. Manuel Blum and Prof. Lenore Blum. Due to the COVID-19 pandemic, 27 Turing Class students who took the course "Conscious Turing Machine: Cognitive & Computational Science", which was conducted by Prof. Manuel Blum and Prof. Lenore Blum, attended the ceremony online and expressed gratitude for their teaching and guidance on research.



Prof. Manuel Blum, Bruce Nelson Professor at CMU and the winner of the 1995 Turing Award, and Prof. Lenore Blum, Distinguished Career Professor at CMU, will serve as the "Turing Advisor" of the Turing Graduate Program, spearheaded by Prof. John Hopcroft in 2017, an elite program for educating and cultivating the future leaders in the new era of computing. MORE

International Joint Conference on Theoretical Computer Science (IJTCS 2020)

August 17th-22nd, 2020, PKU CFCS



Co-organized by CFCS, Peking University, China Society for Industrial and Applied Mathematics, China Computer Federation, and Association for Computing Machinery China Council, IJTCS 2020 hosted 7 forums with 71 public reports covering the fields of algorithmic game theory, blockchain, multi-agent reinforcement learning, theory of machine learning, quantum computing, machine learning and formal method, algorithm and complexity, which were live-streamed 13 hours per day, attracting more than 100,000 views. MORE









The 5th Youth Forum on Frontiers of Computing

April 5th, 2020, PKU CFCS



The center hosts the CFCS Youth Forum on Frontiers of Computing twice a year, which has become a platform for attracting talented young computer scientists from around the world. We invite candidates to give talks to introduce their research during the forum and take the opportunity to introduce the center to them. With an ever increasing dynamic in the Chinese IT industry and partnership with universities, we also invite industry leaders to explore collaboration opportunities.



The 5th Youth Forum on Frontiers of Computing was held successfully in an unprecedented move where the entire forum was conducted online and was livestreamed as well with around 1500 audience. 8 selected young speakers shared their research during the forum. CFCS expected to see that young scholars with excellent teaching ability and scientific research potential will join the center for the contribution to China's education and research. MORE

Prof. Xiaotie Deng is Elected as Member of Academia Europaea

August 6th, 2020, PKU CFCS



Xiaotie Deng, Boya Chair Professor from CFCS, Peking University is elected as a member of Academia Europaea. Prof. Deng's current research focuses on algorithmic game theory, with applications to Internet Economics and Finance including sponsored search auction, p2p network's economics such as BitTorrent network, sharing economics, and blockchain. His other works cover online algorithms, parallel algorithms, and combinatorial optimization. He was elected as an ACM Fellow in 2008 and was elected as an IEEE Fellow in 2019. MORE

Research on Visual Data Analysis and Simulation Prediction for COVID-19

February 10th, 2020, PKU CFCS



Prof. Baoquan Chen and his students initiated online research during the COVID-19 outbreak and come up with a new mathematical model of disease transmission dynamics to evaluate the effectiveness of some epidemic control measures, and to offer a few tips on preventive measures. Since the article first released on February 10th, it has gained over 100,000 views in a few days. With an increasing impact of this research, it was invited to publish on international scientific magazines. For more information, please visit https://arxiv.org/abs/2002.07096.



Bingchan Zhao, an undergraduate student at PKU, supervised by Dr. Hao Dong, an assistant professor at CFCS and Dr. Jie Fu from Mila, won the 2020 CityLearn Challenge, a reinforcement learning challenge for building energy coordination and demand response. Congratulations!









TURING CLASS NEWS AT A GLANCE

January-June 2020

Improved Bounds for the Sunflower Lemma

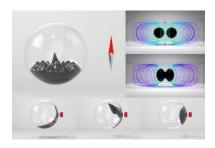
Kewen Wu, from PKU Turing Class (2016), won the Best Paper Award of STOC 2020 with the paper Improved Bounds for the Sunflower Lemma.



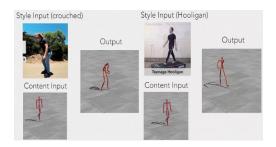
Initiated by CFCS, CS Peer Talk is established as a platform where students can communicate research and share experience. This lecture series, whose speakers are mainly students, is organized by PKU Turing Class students.



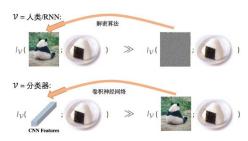
Peizhuo Li, from PKU Turing Class (2017), his paper *Skeleton-Aware* Networks for Deep Motion Retargeting is accepted by SIGGRAPH 2020.



Xingyu Ni, from PKU Turing Class (2016), his paper A Level-Set Method for Magnetic Substance <u>Simulation</u> is accepted by SIGGRAPH 2020.



Yijia Weng, from PKU Turing Class (2017), her paper Unpaired Motion Style Transfer from Video to Animation is accepted by SIGGRAPH 2020.



Yilun Xu, from PKU Turing Class (2016), his paper A Theory of Usable Information Under Computational **Constraints** is accepted by ICLR 2020 (Oral).

CFCS hosted the virtual commencement ceremony of PKU Turing Class (2016) on June 28th, 2020. Prof. John Hopcroft, the director of CFCS and founder of Turing Class, congratulated students on their graduation. In the commencement speech, he advised students to choose something that they are really interested in. "You get only one life to live. It is not the amount of money you are earning but the satisfaction that you will get from having made the world a better place for others in some small way, that you will find most rewarding", said John. MORE







