

# 第 17 届中国计算机系统 (ChinaSys) 学术研讨会

## 会议通知

ChinaSys 是中国计算机系统及相关领域的学术团体,宗旨是为本领域的研究者和从业者提供资源共享、交换思想和会晤的平台,为了促进中国计算机系统行业的发展,兹定于 2019 年 12 月 20 日-21 日在珠海召开 17 届 ChinaSys 研讨会,会议主题为:交流和探讨本领域的最新研究成果,具体安排如下:

### 一、会议时间

2019 年 12 月 20 日-2019 年 12 月 21 日

### 二、会议地点

珠海唐邑酒店 3 楼唐邑厅 (珠海 高新区唐家湾镇金唐路港湾 1 号科创园)

### 三、日程安排

| December 20th, 2019 (3 楼唐邑厅) |  |
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| Time                         | Talks  |
| 8:30-8:40                    | 珠海国家高新技术产业开发区管委会领导致辞—张静华副主任  |
| 8:40 - 8:45                  | 珠海中科先进技术研究院领导致辞—姜长安副院长   |
| 8:45 – 8:50                  | 中科院深圳先进技术研究院领导开幕式致辞—喻之斌  |
| 8:50-10:20                   | Keynote 1<br>Speaker: <b>Onur Mutlu</b> (ETH Zürich, Carnegie Mellon University)   |
| 10:20-10:40                  | Tea Break  |
| 10:40-10:50                  | 合影留念   |
|                              | Session 1  |
| 10:50-11:10                  | <b>No Barrier in the Road: A Comprehensive Study and Optimization of ARM Barriers (PPoPP 2020)</b><br>Nian Liu, Binyu Zang, and Haibo Chen<br>Shanghai Jiao Tong University  |
| 11:10-11:30                  | <b>BBS: Micro-architecture Benchmarking Blockchain Systems through Machine Learning and Fuzzy Set (HPCA 2020)</b><br>Liang Zhu <sup>1</sup> , Chao Chen <sup>1</sup> , Zihao Su <sup>1</sup> , Weiguang Chen <sup>1</sup> , Tao Li <sup>2</sup> , and Zhibin Yu <sup>1</sup><br>1: Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences<br>2: University of Florida |
| 11:30-11:50                  | <b>Nailgun: Breaking the privilege isolation on ARM (S&amp;P 2019)</b><br>Zhenyu Ning, and Fengwei Zhang<br>Southern University of Science and Technology  |
| 11:50-12:10                  | <b>Adaptive Memory-Side Last-Level GPU Caching (ISCA 2019)</b><br>Xia Zhao <sup>1</sup> , Almutaz Adileh <sup>1</sup> , Zhibin Yu <sup>2</sup> , Zhiying Wang <sup>3</sup> , Aamer Jaleel <sup>4</sup> , and Lieven Eeckhout <sup>1</sup><br>1: Ghent University   |

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|                                     | 2: Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences<br>3: National University of Defense Technology<br>4: Nvidia   |
| 12:10-12:30                         | <b>Retrofitting High Availability Mechanism to Tame Hybrid Transaction/Analytical Processing</b><br>Sijie Shen, Rong Chen, and Haibo Chen<br>Shanghai Jiao Tong University  |
| 12:30-14:00                         | Lunch (3 楼唐宴)   |
| 14:00-15:00                         | Keynote 2<br>Speaker: <b>Tao Li</b> (University of Florida)   |
| 15:00-15:20                         | Tea Break   |
|                                     | Session 2   |
| 15:20-15:40                         | <b>Occlum: Secure and Efficient Multitasking Inside a Single Enclave of Intel SGX (ASPLOS 2020)</b><br>Youren Shen <sup>1</sup> , Hongliang Tian <sup>2</sup> , Yu Chen <sup>1</sup> , Yubin Xia <sup>3</sup> , Shoumeng Yan <sup>2</sup> , and Kang Chen <sup>1</sup><br>1: Tsinghua University<br>2: Ant Financial<br>3: Shanghai Jiao Tong University  |
| 15:40-16:00                         | <b>DNNGuard: An Elastic Heterogeneous Architecture for DNN Accelerator against Adversarial Attacks (ASPLOS 2020)</b><br>Xingbin Wang, and Rui Hou<br>State Key Laboratory of Information Security, Institute of Information Engineering, Chinese Academy of Sciences  |
| 16:00-16:20                         | <b>Asymmetric Resilience: A System Architecture for Transient Error Recovery in Accelerator-Rich Processors (HPCA 2020)</b><br>Jingwen Leng <sup>1</sup> , Alper Buyuktosunoglu <sup>2</sup> , Ramon Bertran <sup>2</sup> , Pradip Bose <sup>2</sup> , Quan Chen <sup>1</sup> , Minyi Guo <sup>1</sup> , and Vijay Janapa Reddi <sup>3</sup><br>1: Shanghai Jiao Tong University<br>2: IBM<br>3: Harvard University |
| 16:20-16:40                         | <b>SuperMem: Revitalizing the Write-through Cache for Secure Persistent Memory (MICRO 2019)</b><br>Pengfei Zuo <sup>1</sup> , Yu Hua <sup>1</sup> , and Yuan Xie <sup>2</sup><br>1: Huazhong University of Science and Technology<br>2: University of California, Santa Barbara   |
| 16:40-17:00                         | <b>CoCuckoo: A Write-optimized Concurrent Cuckoo Hashing Scheme for Storage Systems (ATC 2019)</b><br>Yuanyuan Sun, Yu Hua, Zhangyu Chen, and Yuncheng Guo<br>Huazhong University of Science and Technology   |
| 17:00-17:20                         | <b>Adaptive Resource Views for Containers (HPDC 2019)</b><br>Hang Huang <sup>1</sup> , Jia Rao <sup>2</sup> , Song Wu <sup>1</sup> , Hai Jin <sup>1</sup> , Kun Suo <sup>2</sup> , Xiaofeng Wu <sup>2</sup><br>1: Huazhong University of Science and Technology<br>2: University of Texas at Arlington  |
| 17:20-                              | Dinner (3 楼唐宴)  |
| <b>December 21st, 2019 (3 楼唐邑厅)</b> |   |

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| 8:30-9:30   | Keynote 3<br>Speaker: <b>Bingsheng He</b> (National University of Singapore)  |
|             | Session 3   |
| 9:30-9:50   | <b>CrashTuner: Detecting Crash-Recovery Bugs in Cloud Systems via Meta-Info Analysis (SOSP 2019)</b><br>Jie Lu, Liu Chen, Lian Li, and Xiaobing Feng<br>Institute of Computing Technology, Chinese Academy of Sciences  |
| 9:50-10:10  | <b>Modelling and Analyzing Computations in Graph Neural Networks</b><br>Zhihui Zhang <sup>1</sup> , Jingwen Leng <sup>1</sup> , Lingxiao Ma <sup>2</sup> , Youshan Miao <sup>3</sup> , Chao Li <sup>1</sup> , and Minyi Guo <sup>1</sup><br>1: Shanghai Jiao Tong University<br>2: Peking University<br>3: Microsoft  |
| 10:10-10:30 | Tea Break   |
| 10:30-10:50 | <b>An End-to-End Automatic Cloud Database Tuning System Using Deep Reinforcement Learning (SIGMOD 2019)</b><br>Ji Zhang <sup>1</sup> , Yu Liu <sup>1</sup> , Ke Zhou <sup>1</sup> , Guoliang Li <sup>2</sup> , Zhili Xiao <sup>3</sup> , Bin Cheng <sup>3</sup> , Jiashu Xing <sup>3</sup> , Yangtao Wang <sup>1</sup> , Tianheng Cheng <sup>1</sup> , Li Liu <sup>1</sup> , Minwei Ran <sup>1</sup> , and Zekang Li <sup>1</sup><br>1: Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology<br>2: Tsinghua University<br>3: Tencent Inc. |
| 10:50-11:10 | <b>KnightKing: A Fast Distributed Graph Random Walk Engine (SOSP 2019)</b><br>Ke Yang <sup>1</sup> , Mingxing Zhang <sup>1</sup> , Kang Chen <sup>1</sup> , Xiaosong Ma <sup>2</sup> , Yang Bai <sup>3</sup> , and Yong Jiang <sup>1</sup><br>1: Tsinghua University<br>2: Qatar Computing Research Institute, HBKU<br>3: 4Paradigm Co. Ltd.  |
| 11:10-11:30 | <b>AutoFFT: A Template-Based FFT Codes Auto-Generation Framework for ARM and X86 CPUs (SC 2019)</b><br>Li Zhihao, Haipeng Jia, and Chen Tun<br>Institute of Computing Technology, Chinese Academy of Sciences   |
| 11:30-11:50 | <b>Capuchin: Tensor-based GPU Memory Management for Deep Learning (ASPLOS 2020)</b><br>Xuan Peng, Xuanhua Shi, Hulin Dai, Weiliang Ma, and Qian Xiong<br>Huazhong University of Science and Technology  |
| 11:50-12:05 | SIGOPS 颁奖   |
| 12:05-12:15 | 闭幕式致辞   |
| 12:15-14:00 | Lunch (3楼唐宴)  |
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