

# SupercomputingAsia 2023 (SCA23) conference announces recipients of annual SCA Awards and launch of the Data Mover Challenge 2023

The SupercomputingAsia Conference recognised key high performance computing (HPC) pioneer-leaders with its annual SCA23 Awards. The international Data Mover Challenge 2023 (DMC23) was also launched at the conference.

**Singapore, 1 March 2023** – The SCA Awards are an opportunity for the HPC community to recognise and celebrate those who have contributed significantly in one way or another to High-Performance Computing, or those who have been instrumental in the development of the HPC ecosystem, particularly for the Asian or Indo-Pacific region.

This year's SCA23 Award recipients have been recognised for their contributions towards the development of HPC in their respective countries and towards driving international HPC cooperation and collaboration through their activities.

"The recipients of this year's SCA Awards have demonstrated visionary leadership and exceptional innovation and contributions to HPC and related technologies. The four SCA23 award winners have greatly impacted the HPC communities with their impactful achievements and have advanced HPC both domestically and across the region," said Associate Professor Tan Tin Wee, Chair of the SCA23 Awards.

The Supercomputing Asia 2023 (SCA23) Award winners are:

Award Name	Name	Designation	Citation	
SCA HPC Distinguished Service Award (Singapore)	Mr Peter Ho	Inaugural Chairman, Steering Committee, NSCC Singapore	For visionary leadership in establishing high-performance computing (HPC) as a strategic national research infrastructure and setting in place policies and long-term strategies to exploit HPC to enhance Singapore's scientific research, technological innovations and economic competitiveness.	
SCA HPC Distinguished Service Award (Japan)	Professor Shinji Shimojo	Director and Professor, Cybermedia Center, Osaka University	For helping establish the research and development of Japan's HPC networks, and promoting its links with international research networks.	
SCA HPC Pioneer & Achievement Award (Japan)	Professor Kengo Nakajima	Professor and Leader of Supercomputing Research Division, Information Technology Center, University of Tokyo, Japan & Deputy	For pioneering work in the development of HPC research in Japan in the areas of large-scale parallel computing, the development of flagship systems and in promoting HPC education.	



		Director, RIKEN-CCS, Japan	
SCA HPC Network Achievement Award (Posthumous)	Emeritus Professor Lawrence Wong Wai Choong	Former President, Singapore Advanced Research and Education Network (SingAREN) & Former Chair, SupercomputingAsia (SCA) Conference Organising Committee	For pioneering the establishment of the Singapore Advanced Research and Education Network, linking local and international research collaborations via the network, and mentoring the international SCA conference series.

The winners were nominated, assessed and selected based on their significant and pioneering contributions to the HPC community. The SCA23 awards were presented at the SCA23 Awards Ceremony, held on 28 February 2023 at the <a href="SupercomputingAsia 2023">SupercomputingAsia 2023</a> (SCA23) conference in Singapore.



Ms Chan Lai Fung, Permanent Secretary (National Research & Development), National Research Foundation (right) and Mr Quek Gim Pew, Chairman, NSCC Steering Committee (left) presenting the award to the SCA23 Awards recipients at the SCA23 Conference in Singapore.

For more information about our winners, please refer to the Annexes below.

For more information about the SupercomputingAsia Awards and past winners, please visit <a href="https://www.sc-asia.org/sca-awards/">https://www.sc-asia.org/sca-awards/</a>.

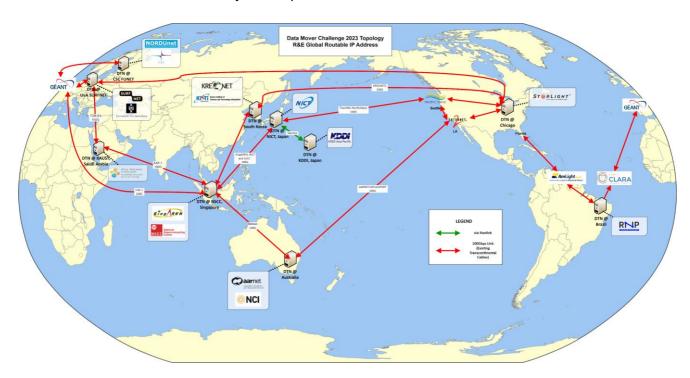
#### **Data Mover Challenge 2023**

Moving data is an essential foundation of national and global science. The international Data Mover Challenge (DMC) is a competition organised by the National Supercomputing Centre (NSCC) Singapore that aims to bring together experts from industry and academia in a bid to test their software and solutions



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for transferring huge amounts of research data. Run once every two years, the DMC competition encourages international teams to come up with the most advanced and innovative solutions for data transfer across servers located in Singapore, Australia, Canada, Europe, USA, South Korea, Japan and Saudi Arabia that are connected by 100Gbps international research and education networks.



DMC23 was officially launched at the SupercomputingAsia 2023 (SCA23) conference and will run from 1 August to 31 October 2023. Registration for the challenge will open on 2 April 2023 and is open to all organisations, companies, research institutions, academia, researchers, post-graduate students and undergraduate students.

Competitors will be assessed and selected by an international panel of judges comprising domain experts and professionals in the field of networking and data transfer. Members of the judging panel for DMC23 include:

Name	Designation & Organisation	Panel
Andrew Howard	Associate Director – Cloud Services, National Computational Infrastructure (NCI), Australia	Chief Judge
Marcos Felipe Schwarz R&D Manager, RNP, Brazil		Judge
Francis Lee Bu Sung	Associate Professor, School of Computer Science and Engineering, Nanyang Technological University (NTU), Singapore	Judge
Tim Chown	Network Development Manager, Jisc, United Kingdom	Judge

For more information about the Data Mover Challenge 2023 (DMC23), the participants and the supporting partners, please visit <a href="https://www.nscc.sg/data-mover-challenge-2023/">https://www.nscc.sg/data-mover-challenge-2023/</a>.



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#### About the SupercomputingAsia 2023 (SCA23) Conference

Co-organised by HPC centres from Australia, Japan, Singapore and Thailand, SupercomputingAsia 2023 (SCA23) is an annual conference that encompasses an umbrella of notable supercomputing and allied events in Asia. SCA23 will be held as a physical conference from 27 February to 2 March 2023. The key objective of the SupercomputingAsia conference is to promote a vibrant and relevant HPC ecosystem in Asia. Delegates will be able to gain access to visionary insights from thought leaders in academia and industry, optimum networking opportunities and the supercomputing community in Asia. The conference co-organisers include the National Supercomputing Centre (NSCC) Singapore, RIKEN Center for Computational Science (R-CCS), Research Organization for Information Science and Technology (RIST), Pawsey Supercomputing Centre, National Computational Infrastructure (NCI) Australia and NSTDA Supercomputer Center (ThaiSC). Since 2018, the SCA conference series has quickly grown to become a key meeting and networking platform for the HPC and supercomputing value chain for Asia and internationally. Partners share new insights, discuss trends and present the latest advances in the development of HPC. The conference attracts international delegates including midand C-level executives, principal researchers and HPC professionals from academia, industry and the public sector.

#### About the National Supercomputing Centre (NSCC) Singapore

The National Supercomputing Centre (NSCC) Singapore was established in 2015 to manage Singapore's national petascale facilities and high-performance computing (HPC) resources. As a National Research Infrastructure funded by the National Research Foundation (NRF), the HPC resources that we provide helps support the research needs of the public and private sectors, including research institutes, institutes of higher learning, government agencies and companies. With the support of our stakeholders, for example, the Agency for Science Technology and Research (A\*STAR), Nanyang Technological University (NTU), National University of Singapore (NUS), Singapore University of Technology and Design (SUTD), National Environment Agency (NEA) and Technology Centre for Offshore and Marine, Singapore (TCOMS), NSCC catalyses national research and development initiatives, attracts industrial research collaborations and enhances Singapore's research capabilities. For more information, please visit <a href="https://www.nscc.sg/">https://www.nscc.sg/</a>



#### Annex A - Information on SCA23 Award Winners

## **SCA HPC Distinguished Service Award (Singapore)**

The HPC Distinguished Service Award recognises an individual with long-service and contribution within the local HPC community.

#### Citation

For visionary leadership in establishing high-performance computing (HPC) as a strategic national research infrastructure and setting in place policies and long term strategies to exploit HPC to enhance Singapore's scientific research, technological innovations and economic competitiveness.



Mr Peter Ho

Inaugural Chairman, Steering Committee, NSCC Singapore

Peter Ho is the Senior Advisor to the Centre for Strategic Futures, a Senior Fellow in the Civil Service College, and a Visiting Fellow at the Lee Kuan Yew School of Public Policy.

Peter Ho is Chairman of the Urban Redevelopment Authority of Singapore (URA), Chairman of the Social Science Research Council (SSRC), Chairman of the Singapore Centre on Environmental Life Sciences Engineering (SCELSE), and Chairman of the Campus for Research Excellence and Technological Enterprise (CREATE) Governing Council. He was Chairman of the National Supercomputing Centre (NSCC) Steering Committee, and He is a member of the Board of Trustees of the National University of Singapore (NUS), and a board member of the National Research Foundation (NRF), a member of the Board of Governors of the S Rajaratnam School of International Studies (RSIS), and of the Lee Kuan Yew School of Public Policy (LKYSPP).

When he retired from the Singapore Administrative Service in 2010 after a career in the Public Service stretching more than 34 years, he was Head, Civil Service, concurrent with his other appointments of Permanent Secretary (Foreign Affairs), Permanent Secretary (National Security & Intelligence Coordination), and Permanent Secretary (Special Duties) in the Prime Minister's Office. Before that, he was Permanent Secretary (Defence). He was also the inaugural Chairman of the Maritime and Port Authority of Singapore.

# **SCA HPC Distinguished Service Award (Japan)**

The HPC Distinguished Service Award recognises an individual with long-service and contribution within the local HPC community.

#### Citation



For helping establish the research and development of Japan's HPC networks, and promoting its links with international research networks.



# Professor Shinji Shimojo

Director and Professor, Cybermedia Center, Osaka University

Shinji Shimojo received the M.E. and Ph.D. degrees from Osaka University in 1983 and 1986, respectively. He was an Assistant Professor with the Department of Information and Computer Sciences, Faculty of Engineering Science at Osaka University from 1986, and an Associate Professor with the Computation Center from 1991 to 1998. During this period, he also worked for a year as a Visiting Researcher at the University of California, Irvine. He has been a Professor with the Cybermedia Center (then the Computation Center) at Osaka University since 1998, and from 2005 to 2008 and from 2015 to 2023 had been the director of the Center. He was an executive researcher and a director of the Service Platform Architecture Research Center(SPARC) 2008 to 2011 at the National Institute of Information and Communications Technology from 2008 to 2011. His current research work is focusing on a peer-to-peer communication network, ubiquitous network systems, HPC, HPDA and IoT systems. He is a founding member of PRAGMA and CENTRA. He was awarded the Osaka Science Prize in 2005 and by the Minister of Internal Affairs in 2017. He is a member of IEEE, IEICE fellow, and IPSJ fellow.

# **SCA HPC Pioneer & Achievement Award (Japan)**

The HPC-Pioneer & Achievement Award recognises an individual who has been instrumental in shaping their nation's High Performance Computing journey from the start and who has made a significant contribution to its development since.

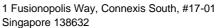
#### **Citation**

For pioneering work in the development of HPC research in Japan in the areas of largescale parallel computing, the development of flagship systems and in promoting HPC education.



# Professor Kengo Nakajima

Professor and Leader of Supercomputing Research Division, Information Technology Center, University of Tokyo, Japan & Deputy Director, RIKEN-CCS, Japan





Kengo Nakajima is a Professor, Supercomputing Research Division, Information Technology Center, the University of Tokyo since 2008. Prior to joining the University of Tokyo in 2004, he spent 19 years in industry. He is also a Deputy Director of RIKEN R-CCS (Center for Computational Science) since 2018, where he is in charge of supervising research teams in computational sciences, and human resource development. His research interest covers computational mechanics, computational fluid dynamics (CFD), computational geophysics, numerical linear algebra, parallel iterative algorithms, parallel preconditioning methods, multigrid methods, parallel programming models, adaptive mesh refinement (AMR), parallel visualization and algorithms on supercomputers in the Post-Moore era. He is the leading PI of "ppOpen-HPC" Project (Open Source Infrastructure for Development and Execution of Large-Scale Scientific Applications on Post-Peta-Scale Supercomputers with Automatic Tuning (AT)) supported by Japan Science and Technology Agency (JST) (FY.2011-2015), and also a co-PI of "ESSEX-II" Project (Equipping Sparse Solvers for Exascale) under collaboration between JST-CREST (Japan) and DFG-SPPEXA (Germany) (FY.2015-2018). Since 2019, he has been leading "h3-Open-BDEC" project (FY. 2019-2023), supported by JSPS Grants-in-Aid for Scientific Research (S). B.Eng (1985, Aeronautics, University of Tokyo), M.S. (1993, Aerospace Engineering, University of Texas at Austin), Ph.D. (2003, Engineering Mechanics, University of Tokyo).

### **SCA HPC Network Achievement Award (Posthumous)**

For their contribution towards helping to grow the HPC ecosystem in Asia, SCA HPC Network Achievement Award recognises individuals or organisations who have played key roles in helping develop the HPC infrastructure and the related ecosystem in the region

#### Citation

For pioneering the establishment of the Singapore Advanced Research and Education Network, linking local and international research collaborations via the network, and mentoring the international SCA conference series.



# Emeritus Professor Lawrence Wong Wai Choong

Former President, Singapore Advanced Research and Education Network (SingAREN) & Former Chair, SupercomputingAsia (SCA) Conference Organising Committee

Lawrence Wong Wai Choong, Emeritus Professor at the Department of Electrical and Computer Engineering, National University of Singapore (NUS). He was previously Executive Director of the Institute for Infocomm Research (I2R), Singapore, from Nov 2002 – Nov 2006. Since joining NUS in 1983, he served in various positions at the department, faculty, and university levels, including Deputy Director (Strategic Development) of the Interactive & Digital Media Institute (IDMI) from since 2009, Head of the Department of Electrical and Computer Engineering from Jan 2008 – Oct 2009, Director of the NUS Computer Centre from Jul 2000 – Nov 2002, and Director of the Centre for Instructional Technology from Jan 1998 – Jun 2000. Prior to joining NUS in 1983, he was a Member of Technical Staff at AT&T Bell Laboratories, Crawford Hill Lab, NJ, USA, from 1980 to 1983.



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He was an IEEE Life Senior Member and a dedicated IEEE volunteer for over three decades, making countless innovative contributions. He served as IEEE Vice President, Member and Geographic Activities (2015), IEEE Region 10 Director (2011–2012), IEEE Singapore Section Chair (1993–1996), IEEE Computer Society Singapore Chapter Chair (1987–1988) and, most recently, Operations Chair of IEEE ComSoc GIMS, from January 2022. Lawrence also had vast experience as conference organizer and played major roles in numerous conferences.

Lawrence has over 200 publications and 4 patents and was a co-author of the book "Source-Matched Mobile Communications". He received the IEEE Marconi Premium Award in 1989, NUS Teaching Award in 1989, IEEE Millennium Award in 2000, the e-innovator Awards in 2000, Open Category, and Best Paper Award at the IEEE International Conference on Multimedia and Expo (ICME) 2006.