NUS is a large and diverse milieu of talented individuals, pressing forward together in a journey to become a truly great university. As a community, we are working together to pursue excellence in education, research and enterprise, in service of country and society.

Today, we are witnessing the fastest pace of change the world has ever seen. The 4th Industrial Revolution, Industry 4.0, is bringing about deep disruptions to economy, industry and society. The world is being transformed and this change can be daunting. But as the world enters a digital age of hyperconnectivity, Industry 4.0 presents many exciting possibilities and rich opportunities to thrive, advance and build new niches of excellence.

The enduring NUS values of Respect, Resilience, Integrity and Innovation (“2R2I”) will see NUS through the vicissitudes and NUS can rise to future challenges with fortitude and emerge stronger than before.

Our University Awards recipients exemplify the NUS values. They have pursued their passions at NUS with an indefatigable spirit, bold imagination for betterment, and an assiduous quest for excellence. Their achievements give us a peek into the boundless possibilities of what we can each reach for at NUS, if only we dare.

The 2018 University Awards recipients are an inspiration and an exemplar to the NUS community. The NUS family celebrates and honours your distinguished accomplishments.

**Professor Tan Eng Chye**
President
National University of Singapore
Outstanding Educator Award
Acknowledges faculty members who have excelled in engaging and inspiring students in their quest for knowledge

Young Researcher Award
Commends researchers whose works show promise in extending the frontiers of knowledge in their respective fields

University Research Recognition Award
Recognises researchers whose works have impacted and advanced the frontiers of knowledge, and positioned NUS at the forefront of their areas of expertise

Outstanding Service Award
Honours individuals who have distinguished themselves by their sustained contributions in serving the University and society
Award Recipients

Outstanding Educator Award
Assoc Prof Kelvin FOONG Weng Chiong
Dr SOO Yuen Jien

Young Researcher Award
Asst Prof ZHAO Dan

University Research Recognition Award
Prof TOH Kim Chuan
Prof Henry YEUNG

Outstanding Service Award
Prof CHONG Chi Tat
Mr LIM Chuan Poh
Outstanding Educator Award
CURRENT TEACHING PORTFOLIO
☆ Programme Director, Master of Dental Surgery Postgraduate Coursework in Orthodontics
☆ Module coordinator, Undergraduate Orthodontics
☆ Research Process & Design and Scientific Writing for postgraduate dental students

TEACHING ACHIEVEMENTS
☆ Implemented a new teaching pedagogy in the MDS Orthodontics programme which fosters collaborative learning among the students through the use of a “ground-up” approach
☆ Transformed a treatment-focused approach at the undergraduate programme level in orthodontics to a diagnostic-focused approach which is aligned with the teaching in the United Kingdom and Australian dental schools
☆ Developed a Technology-Enhanced Learning framework that guides the development, use, and evaluation of technology tools for dental education
☆ Instituted the principle of “Teach Less, Learn More” to underpin the undergraduate dentistry curriculum review which led to the removal of subject matter repetitions, alignment of similar subjects for an improved synchronisation of teaching, and better focus and learning for students

PUBLICATION CREDITS
☆ Published 50 papers in internationally referred publications such as American Journal of Orthodontics and Dentofacial Orthopedics and IEEE Transactions on Medical Imaging, and over 100 joint conference papers

INTERNATIONAL STANDING
☆ Presented the keynote Percy Raymond Begg Lecture at the 24th Australian Orthodontic Congress in 2014; and the keynote Milton Reginald Sims Memorial Lecture at the 47th Australasian Begg Orthodontic Society meeting in 2011
☆ Recognised by the International Journal of Paediatric Dentistry, the leading scientific journal in Paediatric Dentistry, as one of two Reviewers for the Year for 2011, out of 537 reviewers

AWARDS AND ACCOLADES
☆ Annual Teaching Excellence Award (2004/05, 2003/04, 1996/97), NUS
☆ Faculty Teaching Excellence Award (2016/17, 2004/05, 2003/04, 2001/02), NUS Dentistry
☆ Academic Medicine Development Award from the National University Health System (2013)

OUTSTANDING EDUCATOR AWARD

Assoc Prof Kelvin FOONG
Weng Chiong
PhD (NUS)
M Orth (Royal College of Surgeons of Edinburgh)
MDS Orthodontics (The University of Adelaide)
BDS (NUS)
Faculty of Dentistry

CURRENT TEACHING PORTFOLIO
☆ Introduction to Operating Systems
☆ Computer Organisation
☆ Introduction to Parallel Computing
☆ Embedded System Design Project
☆ Software Engineering

TEACHING ACHIEVEMENTS
☆ Developed the Archipelago system, an interactive lightweight web application to enable large-scale in-class and real-time interaction with the students. The platform, which is a Learning Innovation Fund – Technology (LIF-T) project, has been formally administered and supported by NUS Centre of Instructional Technology since 2017
☆ Completed two other LIF-T projects, namely, flipped classroom mastery learning based on the gamification platform coursemology developed by NUS Computing, and the creation and deployment of four mobile applications for the teaching of Chemistry-related modules
☆ Member, Executive Council of the NUS Teaching Academy since 2016
☆ Member, LIF-T Proposal Review Panel since 2015
☆ Member, Computer Science Standing Teaching Evaluation Committee since 2015

PUBLICATION CREDITS
☆ Published articles on the development and delivery of teaching materials, including “Whiteboard versus PowerPoint: Friend or Foe” in the Centre for Development of Learning & Teaching’s Technology in Higher Education: State of the Art (eBook), March 2011; and “Bring back the whiteboard charms into PowerPoint presentation”, in CDTL Link, November 2006
☆ Published a book chapter jointly with Dr Emelyn Tan from NUS Chemistry, titled “Creating Apps: A Non-IT Educator’s Journey Within a Higher Education Landscape” in Mobile Learning in Higher Education in the Asia Pacific: Harnessing Trends and Challenging Orthodoxy

AWARDS AND ACCOLADES
☆ Annual Teaching Excellence Award (2012/13, 2010/11, 2007/08) and Honour Roll (2014), NUS
☆ Faculty Teaching Excellence Award (2016/17, 2009/10, 2008/09, 2007/08, 2006/07) and Honour Roll (2010), NUS Computing

Dr SOO Yuen Jien
PhD, MSc, BSc (NUS)
Department of Computer Science
Young Researcher Award
Asst Prof ZHAO Dan
PhD (Texas A&M University)
MSc, BEng (Zhejiang University)
Department of Chemical & Biomolecular Engineering

RESEARCH INTERESTS
☆ Advanced porous materials
☆ Membrane science and technologies
☆ Clean energy and environmental sustainability

RESEARCH ACHIEVEMENTS
☆ Opened up new possibilities in the design, synthesis and scaled-up production of advanced porous materials including metal-organic frameworks (MOFs) and covalent organic frameworks
☆ Pioneered the preparation of smart two-dimensional (2D) MOF membranes for gas separation. The finding was published in Nature Communications in February 2017
☆ Pioneered the introduction of molecular rotors into organic 2D materials for enhanced chemical sensing. The finding was published in Nature Communications in October 2017
☆ Raised research grants of $23.2 million from the Agency for Science, Technology and Research, Ministry of Education and NUS
☆ Discoveries have led to 13 patents and patent applications filed, with one licensed to industry on the development of gas sensing technologies

PUBLICATION CREDITS
☆ Published more than 80 peer-reviewed papers with 14 highly cited papers in Web of Science
☆ Obtained over 6,000 total citations with a Hirsch index of 31

INTERNATIONAL STANDING
☆ Keynote speaker in international conferences including Euromat2017 and 1st International Symposium on Porous Organic Polymers 2017
☆ Reviewer for more than 50 leading chemical engineering and energy journals including Energy & Environmental Science, Advanced Materials and Nature Communications
☆ Editorial advisory board member of Inorganic Chemistry and Early Career board member of ACS Sustainable Chemistry & Engineering

AWARDS AND ACCOLADES
☆ Young Researcher Award, NUS Engineering (2017)
☆ Outstanding Youth Award, 2017 Global Chinese Chemical Engineers Symposium
☆ Outstanding Young Faculty Award, American Institute of Chemical Engineers’ Singapore Land Section (2017)
☆ Commendation List for Teaching, NUS Engineering (2016)
University Research Recognition Award
Prof TOH Kim Chuan
PhD (Cornell University)
MSc, BSc (NUS)
Departments of Mathematics, and
Analytics and Operations
Institute of Operations Research
and Analytics, NUS

RESEARCH INTERESTS
- Development of numerical algorithms and software for convex conic programming, especially for semidefinite programming and its applications
- Development of numerical algorithms and software for optimisation problems in operations research, machine learning, statistics, and data science
- Preconditioned iterative methods for large linear systems of equations

PUBLICATION CREDITS
- Published more than 90 articles and conference papers in leading journals and prestigious conferences

INTERNATIONAL STANDING
- Area Editor (convex optimisation), Mathematical Programming Computation (since 2008); Associate Editor, SIAM J. Optimization (since 2007); Subject Editor, Optimization and Engineering (since 2014); and Associate Editor, Mathematical Programming (since 2018)
- Secretary, SIAM Optimization Activity Group, Society for Industrial and Applied Mathematics (SIAM) (2014-2016)

AWARDS AND ACCOLADES
- Provost’s Chair Professorship, NUS (2016-2019)
- Fellow, SIAM (2018)
- Farkas Prize, Institute for Operations Research and the Management Services Optimization Society (2017)
- Outstanding Researcher Award, NUS (2003)

Prof Henry YEUNG
PhD (University of Manchester)
BA (NUS)
Department of Geography

RESEARCH INTERESTS
- Theories and the geography of transitional corporations
- Global production networks and global value chains
- East Asian firms and developmental states in the global economy

RESEARCH ACHIEVEMENTS
- Received the AAG Distinguished Scholarship Honours for 2018, the American Association of Geographers’ (AAG) highest awards, in recognition of his extraordinary scholarship and leadership in geography
- Conferred the Royal Geographical Society [RGS] (with the Institute of British Geographers [IBG]) Murchison Award 2017, for pioneering publications in the field of globalisation
- First person from Asia to be recognised with top awards/honours of AAG and RGS-IBG, the most important professional bodies in geography

PUBLICATION CREDITS
- Published five monographs, over 95 research papers in internationally peer-reviewed journals, and 50 book chapters
- Achieved citations in more than 2,500 papers and a Hirsch index of 28

INTERNATIONAL STANDING
- Editor of top geography journals, such as Economic Geography and Environment and Planning A since 2001
- Editorial board member of 20 leading international journals, including Journal of Economic Geography and Journal of International Business Studies
- A regular keynote speaker at international conferences, and a consultant for projects by government agencies and international organisations, such as the International Monetary Fund, the United Nations Conference on Trade and Development, the Asia-Pacific Economic Cooperation and the ASEAN Secretariat

AWARDS AND ACCOLADES
- Distinguished Professorship, NUS (2018)
- Elected Academician, Academy of Social Sciences, UK (2012)
- Outstanding Researcher Award, NUS (2008)
Outstanding Service Award
CURRENT PORTFOLIO
☆ University Professor, Department of Mathematics, NUS Science
☆ Director, Institute for Mathematical Sciences, NUS
☆ Chairman, Asia Research Institute and Smart Systems Institute, NUS, and Member, Management Board, Risk Management Institute, NUS and NUS (Suzhou) Research Institute
☆ Member, Management Board, Temasek Life Sciences Laboratory

LIFETIME ACHIEVEMENTS
☆ Prof Chong has an international reputation in the field of mathematical logic specialising in the theory of computation. He has written two books and has published in the most prestigious mathematical journals such as the Journal of the American Mathematical Society. His two landmark papers published in 2014 and 2017 respectively, addressed two prominent problems in the reverse mathematics of Ramsey theory open for 20 years
☆ Served as Head of Department of Mathematics (2006-2012); Deputy Vice Chancellor, Provost and Deputy President (1996-2004); Head of Department of Information Systems and Computer Science (1993-1996); and Vice Dean of Science (1985-1996)
☆ Appointed NUS’ second University Professor in 2004, the highest honour bestowed upon a very select group of the University’s tenured faculty

SERVICE TO NATION AND INTERNATIONAL COMMUNITY
☆ Contributed significantly in several key areas of university administration when NUS was undergoing a major transformation in education and research, from 1996 to 2002:
  - Chaired the University Curriculum Committee which implemented a broad-based, education curriculum. The curriculum provided breadth and depth to NUS undergraduate education and incorporated the Undergraduate Research Opportunities Programme for talented students
  - Oversaw the implementation of the Cumulative Average Point system, which is now used as a basis for measuring student performance at NUS and other universities in Singapore
  - Incorporated information technology in teaching and learning with the introduction of the Integrated Virtual Learning Environment that has formed a major component of the student learning experience
  - Chaired the MOE Steering Committee in 2002 on the establishment of the NUS High School for Mathematics and Science, and the MOE Committee in 2003 on the revamp of the GCE A-Level curriculum

AWARDS AND ACCOLADES
☆ Fellow, Singapore National Academy of Science (2011)
☆ Public Administration Medal (Gold), Singapore (2002)
☆ Honorary Professor, Nanjing University (1996)
☆ Managing Editor of the Journal of Mathematical Logic, and a regular reviewer for mathematical journals and research grant applications in the United States, Canada and New Zealand
☆ Member, NUS Council (2000-2004); National Institute of Education Council (1995-2003); Board of Trustees of SIM University (2006-2015); Arts Education Council (2000-2003); and the Information and Communications Technology Management Committee (1999-2003)

It is a great honour to receive this award. I have been privileged with the opportunity to work with many outstanding colleagues dedicated to the advancement of the University. I am hopeful that the joint effort of talented individuals will now bring NUS to the next level.

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CURRENT PORTFOLIO
☆ Chairman, Agency for Science, Technology and Research (A*STAR)
☆ Chairman, Governing Board, Lee Kong Chian School of Medicine, Nanyang Technological University (NTU)
☆ Board Member, National Research Foundation; and NTU
☆ Board and Council Member, Science and Technology in Society forum
☆ Member, World Premier International Initiative Programme Assessment and Review Committee
☆ Special Committee Member, Japan Science and Technology Advisory Committee
☆ Founding Member, Frost and Sullivan Board of Governors of the Economic Development Innovation Council

LIFETIME ACHIEVEMENTS
☆ Mr Lim carved an illustrious 23-year career with the Singapore Armed Forces (SAF). During his term as the Chief of Army followed by Chief of Defence Force from 1998 to 2003, then LG (NS) Lim oversaw the operational deployment of SAF Peacekeeping Troops to Timor Leste
☆ In response to heightened global security climate, LG (NS) Lim worked closely with the Home Front agencies and led SAF efforts to put in place plans and measures to counter the threats of catastrophic terrorism
☆ LG (NS) Lim also spearheaded the growth and development of the SAF as a technologically ready and advanced integrated force capable of a spectrum of operations. He further contributed to defence diplomacy by hosting the inaugural Pacific Armies Chiefs Conference and the first Chiefs of Defence Conference to be held outside the United States

SERVICE TO NATION AND INTERNATIONAL COMMUNITY
☆ As former Permanent Secretary (Education), Mr Lim oversaw the transformation of publicly funded universities into Autonomous Universities (AUs) to enable them to reach new peaks of excellence
☆ He reviewed the university research framework that led to the creation of the Academic Research Council and a new Academic Research Funding Framework. A specific proposal of the review was the hosting of Research Centres of Excellence by the AUs to catalyse their evolution into research-intensive universities
☆ He oversaw the framework for the polytechnics to tie up with top foreign institutions to offer degree programmes in specialised areas
☆ He guided the establishment of the Duke-NUS Medical School
☆ Mr Lim steered the launch of various initiatives between NUS and A*STAR including the schemes of A*STAR-Academia Pathways such as the Joint Appointment Scheme (Research and Academic Dual Career Track), and the Singapore International Graduate Award. NUS and A*STAR also established several research partnerships and joint research units such as the Clinical Imaging Research Centre, Singapore Institute for Neurotechnology, Translational Laboratory in Genetic Medicine, and five joint laboratories between NUS Engineering and A*STAR’s SIMTech
☆ At A*STAR, Mr Lim pioneered an open innovation framework, which reflects that no single entity has all the resources, capabilities and research required to solve the ‘big questions’. His inspirational vision is that new knowledge creation and innovation are hugely accelerated when scientific communities around the world galvanise to work collaboratively towards a common purpose

AWARDS AND ACCOLADES
☆ Honorary Doctor of Science, Cranfield University (2017); University of Warwick (2016); and Loughborough University (2008)
☆ Honorary Doctor of Laws, Arizona State University (2012); and Monash University (2009)
☆ Order of the Legion of Honour, France (2016)
☆ Fellowship under the Invitation Programme for Leaders by the Japanese Ministry of Foreign Affairs (2010)
☆ Fellowship of Imperial College (2010)
☆ Bintang Yudha Dharma Utama (The Grand Meritorious Military Order – 1st Class) (2001)
☆ Knight Grand Cross of the Most Exalted Order of the White Elephant, Thailand (2001)
☆ Legion of Merit (Degree of Commander), US (1999 and 2001)
☆ Public Administration Medal, Gold (Military) (1999)

In this era of geostrategic shifts and rapid technological change, there are great opportunities as there is increased risk of disruptions. NUS’ mission to transform the way people think and do things will be decisive in determining which trajectory Singapore will be on.
Award Recipients

- Prof CHONG Chi Tat
  Outstanding Service Award

- Mr LIM Chuan Poh
  Outstanding Service Award

- Prof TOH Kim Chuan
  University Research Recognition Award

- Prof Henry YEUNG
  University Research Recognition Award

- Asst Prof ZHAO Dan
  Young Researcher Award

- Assoc Prof Kelvin FOONG Weng Chiong
  Outstanding Educator Award

- Dr SOO Yuen Jien
  Outstanding Educator Award