

## CURRICULUM VITAE



### **Dr. John-John Cabibihan**

Associate Professor  
Mechanical and Industrial Engineering Department  
College of Engineering  
Qatar University

(CV last updated: August 2021)

### CONTACT INFORMATION

**Mailing Address:**

Department of Mechanical & Industrial Engineering,  
College of Engineering,  
Qatar University,  
P.O. Box 2713, Doha, Qatar

**Webpage:** [www.johncabibihan.com](http://www.johncabibihan.com)

**Email:** [john.cabibihan@qu.edu.qa](mailto:john.cabibihan@qu.edu.qa)

**Tel:** (974) 4403-4368

### BIO-SKETCH

John-John Cabibihan received the Ph.D. degree in Bioengineering, with specialization in Biorobotics, from the Scuola Superiore Sant'Anna, Pisa, Italy, in 2007. Concurrent with his Ph.D. studies, he was accepted to the co-tutors PhD programme of the École Normale Supérieure Paris-Saclay, France. Therein, he spent one year with the Laboratoire de Mécanique et Technologie in 2005. In 2021, he completed the Venture Creation and Finance Programmes at the University of Oxford, UK.

From 2008 to 2013, he was an Assistant Professor at the Electrical and Computer Engineering Department, National University of Singapore, where he served as the Deputy Director of the Social Robotics Laboratory. He is currently an Associate Professor at the Mechanical and Industrial Engineering Department, Qatar University. He serves as the Program Coordinator of the Mechanical Engineering Graduate Program and a Member of the Faculty Senate (Research Committee). He is Lead/Co-Lead Principal Investigator of several projects under the National Priorities Research Program of Qatar National Research Fund.

Dr. Cabibihan is among the top 2% of researchers worldwide according to the standardized citation metrics (2020). He is ranked #1 in Qatar, #4 in the Middle East, #228 in Asia, and #510 worldwide for the category of Industrial Engineering and Automation (subfield Artificial Intelligence and Image Processing). In April 2021, he was recognized as a Distinguished Scientist by Qatar University.

Dr. Cabibihan is an inventor in 18 patent families and has over 150 publications (journal articles, books, and conference papers). Using the ranking data from the 2021 Clarivate Journal Citation Report, 77% of Dr. Cabibihan's journal publications are in the Q1 (45%) and Q2 (32%) categories. His research in robotics, 4D/3D printing, virtual reality, and biomimetics has attracted more than US\$ 5.7 million in grants from various funding agencies.

He is an Associate Editor/Editorial Board Member of the IEEE Robotics and Automation Letters, Frontiers in Bioengineering and Biotechnology (Section on Bionics and Biomimetics), International Journal of Advanced Robotics Systems, and Springer Nature Applied Sciences Journal. He was a co-Founding Assistant Editor/Editorial Board Member of the International Journal of the Social Robotics and a co-Founding Organizer of the International Conference on Social Robotics (2009).

He actively served the robotics community as General Chair of the International Conference on Social Robotics (ICSR) 2018 in Qingdao, China; and IEEE Cybernetics and Intelligent Systems & Robotics, Automation, and Mechatronics (CIS-RAM) 2013 in Manila, Philippines; as Program Chair/Co-Chair of the IEEE Symposium of Robot-Human Interactive Communications (Ro-Man) 2019 in New Delhi, India; ICSR 2019 in Madrid, Spain; ICSR 2017 in Tsukuba, Japan; ICSR 2016 in Kansas City, USA; ICSR 2012 in Chengdu, China; and ICSR 2010 in Singapore; and as a Member of the Standing Committee of ICSR 2021 in Singapore.

Over the years, his work has been focused toward healthcare robotics, more specifically in assistive and social robotics for the therapy of children with autism, lifelike prosthetics, bio-inspired tactile sensing, human-robotic touch and gestures, and robotic surgery. His works were featured by Nature Materials, MIT Technology Review, British Broadcasting Corporation (BBC), Popular Science, New Scientist, Discovery News, New York Magazine, and in the front pages of Peninsula Qatar, among others. His team's telepresence UV robot was exhibited at the St. Petersburg International Economic Forum 2021 in Russia.

## EDUCATION

- Executive Education Certificate, Venture Creation and Finance Programmes, Saïd Business School, University of Oxford, UK, Oct. 2020-Jan 2021.
- Ph.D. in Bioengineering, Scuola Superiore Sant'Anna (SSSA), Pisa, Italy, Dissertation Title: Skin Materials Selection for Prosthetic and Humanoid Robotic Fingertips (Grade = 100/100). Thesis Committee: Prof. Maria Chiara Carrozza (Principal Adviser, president of the National Research Council of Italy, former Minister of Education of Italy, former Member of the Italian Parliament), Prof. Paolo Dario (IEEE Fellow, world leader in robotics), Prof. Arianna Menciassi (Expert in Medical Robotics) and Prof. Benoni B. Edin (Neurophysiologist, Umea, Sweden), Mar. 2003-May 2007.
- Visiting student on Ph.D. Co-Tutors Fellowship Grant, École Normale Supérieure Paris-Saclay (formerly École Normale Supérieure de Cachan), France, Laboratoire Mécanique et Technologie, Mechanics and Materials Sector, Research project title: Materials evaluation artificial skins for a robotic/prosthetic hand. Supervisors: Prof. Ahmed Benallal (Head of Department), Dr. Stéphane Pattofatto, Nov 2004-Nov 2005.
- Master of Science degree in Manufacturing Engineering with High Distinction (Grade Point Average = 3.95/4.0), De La Salle University, Manila, Philippines. Jan 1999-May 2002.

- Bachelor of Science degree in Manufacturing Engineering and Management, De La Salle University, Manila, Philippines, Gold medal for outstanding thesis, June 1993-Dec 1998.

## CONTINUING EDUCATION

- Design and Parametric Fabrication with Rhino and Grasshopper tools, Madrid, Spain, 28 June-23 July 2021.
- Financial Modeling and Valuation Analyst Certification Course, Corporate Finance Institute, Jan 26, 2021-present.
- Biomedical Research Investigators Course (as required by the Ministry of Public Health, Qatar), Collaborative Institutional Training Initiative (CITI Program), validity: July 21, 2020-July 21, 2023.
- Social and Behavioral Research Investigators Course (as required by the Ministry of Public Health, Qatar), Collaborative Institutional Training Initiative (CITI Program), validity: July 21, 2020-July 21, 2023.
- Behavioral Science to Improve Innovation for Entrepreneurs Workshop, Qatar Behavioral Insights Unit, Supreme Committee for Delivery and Legacy, 7 Oct 2017.
- Agile Project Management and Scrum, KnowledgeHut Solutions, 25-26 Jan 2017.
- Fundraising: How to Connect with Donors, Philanthropy University, Haas School of Business, University of California Berkeley, 14 Feb-12 April 2016.
- From Ideas to Action: Bringing Ideas to Life through Ideation and Prototyping, IDEO, 13 April-18 May 2016.
- Leading for Creativity, IDEO, 18 May-15 June 2016.
- Storytelling for Influence, IDEO, 2 Mar-6 April 2016.

## EMPLOYMENT HISTORY / ACADEMIC APPOINTMENTS

- Senator, Qatar University Faculty Senate, Feb. 2018-present.
- Graduate Program Coordinator of the Mechanical Engineering Program, Qatar University, Jan. 2018-present.
- Associate Member, KINDI Center for Computing Research, Qatar University, Dec. 2020-present.
- Associate Professor, Department of Mechanical & Industrial Engineering, Qatar University, Mar 2015-present.
- Assistant Professor, Department of Mechanical & Industrial Engineering, Qatar University, Sep 2013-Mar 2015.
- Assistant Professor, Department of Electrical & Computer Engineering, National University of Singapore, Feb 2008-Aug 2013.
- Deputy Director, the Social Robotics Laboratory, Interactive and Digital Media Institute, NUS, Sept 2009-Aug 2013.
- Affiliated Faculty, Singapore Institute for Neurotechnology: Advancing through Partnership of Scientists and Engineers (SiNAPSE), NUS, March 2012-Aug 2013.
- Chief Technology Officer, Alternative Resource Integrated Services Enterprise (ALTRIS), Inc., Paranaque, Philippines, Aug. 2007-Feb. 2008.

- Research Collaborator, Advanced Robotics Technologies and Systems Lab, Scuola Superiore Sant'Anna, Pisa, Italy, Jan 2004-Sept 2007.
- Product Development Manager, Coexsys, Inc., Manila, Sept 2002-Jan 2003.
- Instructor, Manufacturing Engineering and Management (MEM) Dept., De La Salle University, Manila, Jan 1999-Jan 2003.
- Machinist, Production Department, Don Bosco Technical College, Mandaluyong City, Philippines, Sept 1997-May 1998.
- CAD Applications Engineer, CIM Technologies, Inc., Makati City, Philippines, May- August 1997.

## VISITING APPOINTMENTS

- Visiting Professor, Biomedical Engineering Lab, Federal University of Uberlandia, Brazil (host: Prof. Alcimar Barbosa Soares), July 8-12, 2019.
- Visiting Professor, Singapore Institute of Neurotechnology (SiNAPSE; host: Prof. Nitish Thakor), July 2-8, 2017.
- Visiting Professor, College of Education, Chinese University of Hong Kong (host: Prof. Catherine Wing Chee So), July 4-12, 2016.
- Visiting Professor, Department of Computer Studies, De La Salle University, Manila, Philippines (host: Dean Merlin Suarez), July 25-29, 2016.
- Visiting Scholar, School of Science, Technology, Engineering and Mathematics, University of Washington, Bothell, USA, (host: Dr. Woon Jong Yoon), July 20-August 3, 2015.

## AWARDS AND RECOGNITION

### PERSONAL AND RESEARCH AWARDS/DISTINCTIONS

1. Distinguished Scientist, Qatar University, April 2021.
2. Top 2% of Researchers Worldwide (#1 in Qatar, #4 in the Middle East, #228 in Asia, and #510 worldwide in the category of Industrial Engineering and Automation, subfield Artificial Intelligence and Image Processing), Standardized Citation Metrics, November 2020.
3. Best Entrepreneurship Success Stories, 2<sup>nd</sup> Prize (with US\$ 1,700 award; sponsored by the Commercial Bank of Qatar), Center for Entrepreneurship (CFE) at Qatar University College of Business and Economics, 2017.
4. Best Student Paper Award (Finalist) for "Design of a Steering Mechanism for a Tethered Capsule Endoscope", X Ye, C Hasson, WJ Yoon, JJ Cabibihan, IEEE International Conference on Robotics, Automation, and Mechatronics, Angkor Wat, Cambodia, 2015.
5. JJ Cabibihan and Mhd Omar Khalifa, From Innovation to Commercialization, 1<sup>st</sup> Prize, Qatar University, 2015.
6. IEEE Senior Member Grade, Feb. 2014. (Only 7% of the society's 431,000 members worldwide are recognized with this distinction).

7. Mitsui Sumitomo Insurance Welfare Foundation Research Award, Jan 2012, with S\$10,000 award.
8. Best Paper Award (Finalist) for "Pointing Gestures for a Robot Mediated Communications Interface", JJ Cabibihan, WC So, M Nazar, SS Ge, International Conference on Intelligent Robotics and Applications, 16-18 Dec 2009.
9. Ph.D. Co-Tutors Fellowship Award, Ecole Normale Superieure de Cachan, France, Nov. 2004-Nov. 2005.
10. European Robotics Network (EURON) scholarship grant for RAS/IFRR Summer School on Human-Robot Interaction, Volterra, Italy, 19-23 July 2004 (Participation based on selection of PhD and Post Doc students worldwide; <http://www.cas.kth.se/ras-ifrr-ss04/index.html>)
11. Ph.D. Fellowship Award, Scuola Superiore Sant'Anna, Pisa, Italy, Mar. 2003 – Jan. 2006.
12. Graduate with High Distinction (3.95/4.0), Master's degree in Manufacturing Engineering, De La Salle University, Manila, Philippines, July 2002.
13. Alumni Medal of Honor, De La Salle University, Manila, Philippines, March 1999.
14. Gold Medal for Outstanding Thesis, De La Salle University, Manila, Philippines, January 1999.
15. Sibol Outstanding Invention Grand Prize, Department of Science and Technology, Republic of the Philippines, November 1998.
16. WIPO Gold Medal for Outstanding Invention, World Intellectual Property Organization, Geneva, Switzerland, November 1998.

#### **AWARDS / RECOGNITION FOR SUPERVISED STUDENTS**

1. Ebtehal Al-Haddad and Zahra Al-Makki of Zubaida Independent Secondary School for Girls, 3<sup>rd</sup> Place for "Qatar Robotics and Automation", Al-Bairaq I'm a Researcher Program, organized by the Center for Advanced Materials, Qatar University (sponsored by UNESCO and Qatar National Commission for Education, Culture, and Science), 20 Feb 2019.
2. Mohammad Houkan, Mohammad Taha, Senior Projects Presentation, 1<sup>st</sup> Place for "Smart capacitive biometric sensors for fingerprint devices security", Mechanical and Industrial Engineering Department, Qatar University, Fall 2016.
3. Mohammad El-Khatib, Mohammad Houkan, Mohammad Taha, Microsoft Imagine Cup, Innovation Category, National Winner (Qatar), April 2016.
4. Mhd Omar Khalifa, Senior Projects Presentation, 1<sup>st</sup> Place for "Robo-Barista", Mechanical and Industrial Engineering Department, Qatar University, Fall 2015.
5. Yahya Osama Alhomsy, Ahmad Hasan Aqel, Mhd Omar Khalifa, Sharief Essam Saleh, Microsoft Imagine Cup, Innovation Category, 3<sup>rd</sup> Place Pan-Arab Regional Competition, June 2015.
6. Yahya Osama Alhomsy, Ahmad Hasan Aqel, Mhd Omar Khalifa, Sharief Essam Saleh, Microsoft Imagine Cup, Innovation Category, National Winner (Qatar), April 2015.
7. Ali Abed, Peter Azer, Mohamed Farag, and Ola Shamia, Microsoft Imagine Cup, Innovation Category, National Winner (Qatar), April 2014.

8. Kee Hong Tat, IEEE Control Systems Chapter Prize for "Quantitative Analysis on the Motion of the Human Hand during a Handshake," Academic year 2010/2011, National University of Singapore.
9. Oo Ju Ee, Finalist in the IEEE Control Chapter Book Prize for the Best Final Year Project in Control Engineering for "Prosthetic Hand with Humanlike Softness and Warmth," Academic year 2009/2010, National University of Singapore.
10. Chew Yun Zhi, ABB Prize for Final Year Project for "Skin Compliance Map of the Human Hand," Academic year 2008/2009, National University of Singapore.
11. Pang Jia Hui, Finalist in the IEEE Control Chapter Book Prize for the Best Final Year Project in Control Engineering for "The Development of control system of an exploration robot," Academic year 2008/2009, National University of Singapore.
12. Kow Yuan-Wei, Finalist in the IEEE Control Chapter Book Prize for the Best Final Year Project in Control Engineering for "Multimodal Sensing Bed System for Personal Health Monitoring," Academic year 2008/2009, National University of Singapore.

## RESEARCH FUNDING

Title, Agency, Amount, Period, Role; **Total as Lead/Co-Lead/PI = US\$ 5.7 million**

1. UV Disinfection Robots in Public Spaces with Teleportation-based Control Schemes, June-August 2020, Qatar National Research Fund Rapid Response Call, RRC-1-024; June-Sept 2020, US\$27,937; Role: **Lead Principal Investigator** (PIs: E Mahdi, AM Hamouda, S Gowid, M Al Hammami).
2. Manipulating reusable and self-disinfecting gloves to prevent COVID-19 transmission and designing an e-dustbin for gloves and masks; Qatar National Research Fund Rapid Response Call, RRC-2-063; June-August 2020, US\$16,483; Role: **Principal Investigator** (LPI: KK Sadasivuni).
3. Smart, Snap-on Device for Detecting Aggressive Behaviors in Children with Autism during Meltdown Events, Qatar University, Marubeni Concept to Prototype, M-CTP-CENG-2020-4, Feb 2020-Dec 2022, US\$ 150,137; Role: **Lead Principal Investigator** (PIs: A Al Ali, KK Sadasivuni. Consultant: AK Pandey of Hanson Robotics).
4. The Sunflower Effect: A Bio-Inspired Approach for Heat-Seeking 4D/3D Printed Solar Cells, Qatar National Research Fund National Priorities Research Program, NPRP12S-0131-190030, Jan 2020-Dec 2023, US\$ 599,640; Role: **Lead Principal Investigator** (PI: KK Sadasivuni).
5. Qatar Robotic Printing, Qatar National Research Fund National Priorities Research Program, NPRP11S-1229-170145, June 2019-May 2022, US\$ 579,120; Role: **Lead Principal Investigator** (PIs: F Fadli, N Alnuaimi, NM Bilorla. Consultants: K Oosterhuis, I Lenard, S Bodea, AM Anton).
6. Non-Invasive Monitor to Predict Hypoglycemia in Diabetes Patients, Qatar National Research Fund National Priorities Research Program, NPRP11S-0110-180247, June 2019-May 2022, US\$ 598,440; Role: **Principal Investigator** (LPI: R Malik; PIs: KK Sadasivuni, AKAM Al-Ali, DSHH Al Mohanadi, KAM Baager, A Butler).
7. Amputee-Driven Design and Development of Upper Limb Prosthesis using Virtual-Physical Methodologies, Qatar University International Research Collaboration Co-Funds (IRCC), IRCC-2019-001, Feb 2019-Jan 2021, US\$ 288,000; Role: Qatar **Lead Principal Investigator** (PIs: MR Paurobally, MS Ajimsha, MA Hammami. Brazil LPI: AB Soares; PI: EA Lamounier Jr).

8. Safe and Adaptive Social Robots for Children with Autism (Phase II), Qatar University Student Grant, QUST-1-CENG-2019-10, Feb. 2, 2019-May 5, 2019, US\$ 5,492 (QAR 20,000); Role: **PhD Supervisor** (Student: AY Alhaddad).
9. Extreme Reverse Innovation Process for the Delivery of Upper Limb Prosthetics via Digital Human Modelling, 3D Printing, and User Acceptance Surveys to Refugees, Qatar University Collaborative and High Impact Grant, QUCG-CENG-2018/2019-3, US\$ 82,384 (QAR 300,000), Jan. 2018-Jan. 2020, Role: **Lead Principal Investigator** (Co-PIs: E Mahdi, LA Lambert, PI: OS Al-Kwifi).
10. Safe and Adaptive Social Robots for Children with Autism, Qatar University Student Grant, QUST-1-CENG-2018-7, Jan. 15, 2018-Dec. 31, 2018, US\$ 5,492 (QAR 20,000), Role: **PhD Supervisor** (Student: AY Alhaddad).
11. Neuromorphic Tactile Sensing: A Paradigm Shift for Prosthetics and Robotic Surgery, NPRP 7-263-2-251, Qatar National Research Fund National Priorities Research Program, US\$ 823,781.75, Jan. 2015-July 2018, Role: **Lead Principal Investigator** (PIs: N Thakor, A Al-Ansari, R Khaliki).
12. Integrated Bio-Sensors and Automated Instrumentation for Early Stomach Cancer Detection Using Flexible Capsule Endoscope, NPRP 4-049-2-021, Qatar National Research Fund National Priorities Research Program, US\$ 1,035,523, 2012-2016, **Co-Lead Principal Investigator** (started Sept 2014).
13. Development of Smart Minimum Invasive Surgery Tools with Tactile Sensing Capabilities for Telerobot Surgery System, NPRP 4-368-2-135, Qatar National Research Fund National Priorities Research Program, US\$ 1,018,554, 2012-2016, Role: **Co-Lead Principal Investigator** (started Sept 2014).
14. Social Robotic Toys for Children, QUSG-CENG-DMI-13/14-4, Qatar University Research Grant, US\$ 12,357 (QAR 45,000), April 2014-Mar 2015, **Sole Investigator**.
15. Robotics for Autism Assessment, National University of Singapore Academic Research Fund, US\$141,376 (S\$ 180,000), Sept 2012-Aug 2015, **Lead Principal Investigator**.
16. Engaging Students with E-learning Tools, National University of Singapore College of Engineering US\$ 12,000 (S\$ 15,290) Sept 2012-Aug 2014, **Sole Investigator**.
17. Load Configuration Physiotherapy System for the Upper Extremities for Patients with Hemiparesis, Mitsui Sumitomo Insurance Welfare Foundation (MSIWF) of Japan Research Grant, US\$ 7,852 (S\$ 10,000), Feb 2012–Feb 2013, **Sole Investigator**.
18. Affective Tele-Touch Technology, National University of Singapore Academic Research Fund, US\$ 111,085 (S\$ 141,467), Feb 2010-Feb 2013, **Lead Principal Investigator**.
19. Design of Prosthetic Skins with Humanlike Softness, National University of Singapore Academic Research Fund, US\$ 141,342 (S\$ 180,000), July 2008-July 2011, **Sole Investigator**.
20. Social Robots: Breathing Life into Machines, National Research Foundation of Singapore, US\$ 1,177,856 (S\$ 1,597,800), Nov 2007–May 2012, **Collaborator** (started March 2010).

## SCHOLARLY ACHIEVEMENTS

### GRANTED PATENTS

- [1] JJ Cabibihan, KK Sadasivuni, AY Alhaddad, Biometrics Liveness Detection through Biocompatible Capacitive Sensor, US 10,810,405 B2, US Patent Office; Granted: 20 Oct 2020.
- [2] JJ Cabibihan, H Javed, KK Sadasivuni, AY Alhaddad, Smart Robotic Therapeutic Learning Toy, US 10,792,581 B2, US Patent Office; Granted: 6 Oct 2020.

### FILED PATENTS

- [1] JJ Cabibihan, KK Sadasivuni, A Tahir, J Abinahed, N Navkar, AA Al-Ansari, A Tactile Sensor, A Surgical Instrument having the same, and a Method of Manufacturing the same, WO 2020/226524 A1, Filed: 12 Nov 2020.
- [2] JJ Cabibihan, A Gaballa, M Mudassir, Multifunctional Tooling Apparatus with Non-Anthropomorphic Construction, Filing No QA/22020206/000332, Filed: 15 June 2020.
- [3] JJ Cabibihan, A Gaballa, M Mudassir, Multifunctional Tooling Apparatus with Non-Anthropomorphic Construction, PCT 16/858,126, Filed: 24 April 2020.
- [4] JJ Cabibihan, KK Sadasivuni, A Tahir, J Abinahed, N Navkar, AA Al-Ansari, A Tactile Sensor, A Surgical Instrument having the same, and a Method of Manufacturing the same, US Provisional Application No.: PCT/QA2019/050011.
- [5] JJ Cabibihan, H Javed, KK Sadasivuni, AY Alhaddad, Smart Robotic Therapeutic Learning Toy, US 2019/0184299 A1, US Patent Office; Publication Date: 20 June 2019.
- [6] JJ Cabibihan, KK Sadasivuni, AY Alhaddad, Biometrics Liveness Detection through Biocompatible Capacitive Sensor, WO 2019/030700, World Intellectual Property Organization; Publication Date: 14 February 2019.
- [7] JJ Cabibihan, KK Sadasivuni, AY Alhaddad, Biometrics Liveness Detection through Biocompatible Capacitive Sensor, US20190050622A1, US Patent Office; Publication Date: 14 February 2019.
- [8] JJ Cabibihan, H Javed, KK Sadasivuni, AY Alhaddad, Smart Robotic Therapeutic Learning Toy, WO 2018/033857A1, World Intellectual Property Organization; Publication Date: 22 February 2018.
- [9] JJ Cabibihan, SS Ge, S Salehi, R Jegadeesan, H Abdul Hakkim, Apparatuses, Systems and Methods for Prosthetic Replacement Manufacturing, Temperature Regulation and Tactile Sense Duplication; WO 2012/008930 A1, Publication date: 19 January 2012.
- [10] JJ Cabibihan, SS Ge, S Salehi, R Jegadeesan, H Abdul Hakkim, Apparatuses, Systems and Methods for Prosthetic Replacement Manufacturing, Temperature Regulation and Tactile Sense Duplication: PCT application number PCT/SG2011/000255, Publication date: 15 July 2011.

### PROVISIONAL APPLICATIONS

- [1] JJ Cabibihan, A Gaballa, Joint Centers Method for Acquiring Human Hand Anthropometry in an Unconstrained Pose, US Provisional Application No.: 63/141,365, Filed: 25 Jan 2021.



- [2] JJ Cabibihan, M Mudassir, A Method for Producing Parametrically Designed 3D Printed Prostheses Using Anthropometric Features, US Provisional Application No.: 63/136,538, Filed: 12 Jan 2021.
- [3] JJ Cabibihan, KK Sadasivuni, AY Alhaddad, Biometrics Liveness Detection through Biocompatible Capacitive Sensor, US Provisional Application No.: 62/543188; Filed: 9 August 2017.
- [4] JJ Cabibihan, H Javed, KK Sadasivuni, AY Alhaddad, Smart Robotic Therapeutic Learning Toy, US Provisional Application No.: 62/375138; Filed: 15 August 2016.
- [5] L Suherlan, JJ Cabibihan, N Thakor, Micro Compliant Pressure Sensor, US Provisional Application No: 61/745,884; Filed: 26 Dec 2012.
- [6] JJ Cabibihan, SS Ge, S Salehi, Apparatus, System, and Method for Tactile Sense Duplication for Prosthetic/Robotic Limbs with Ridged Skin Cover; US Provisional Application No.: 61/370,640; Filed: 4 August 2010.
- [7] JJ Cabibihan, SS Ge, H Abdul Hakim, Rapid Manufacturing of Prosthetic Replacements for Lifelike Form and Motion; US Provisional Application No.: 61/367,723; Filed: 26 July 2010.
- [8] JJ Cabibihan, SS Ge, R Jegadeesan, Temperature Regulation of Prosthetic Replacements to Mimic Human Skin Temperature, US Provisional Application No.: 61/364,660; Filed: 15 July 2010.

#### **INVENTION DISCLOSURES**

- [1] KK Sadasivuni, MR Maurya, MT Houkan, JJ Cabibihan, Continuous Real-Time Hypoglycemia Monitoring with Wearable Sensing Gloves, Invention Disclosure to Qatar University IP Office, Filed: 9 June 2021.
- [2] JJ Cabibihan, H Abdulrazak, and Z Mansour, Multi-Material Nozzle for Concrete Robotic 3D Printing, Invention Disclosure to Qatar University IP Office, Filed: 1 June 2021.
- [3] JJ Cabibihan and MM Radwan, Fast-Ejection Safety System for Hotwire Cutters, Invention Disclosure to Qatar University IP Office, Filed: 30 May 2021.
- [4] KK Sadasivuni, MR Maurya, JJ Cabibihan, AY Alhaddad, H Aly, AK Al-Ali, RA Malik, Automatic Spray Coater for Complete Fabrication of Functional Solar Cell, Invention Disclosure to Qatar University IP Office, Filed: 8 May 2021.
- [5] JJ Cabibihan, A Hegazi, 3D-printed compact bubble-generating mechanism module for educational purposes, Invention Disclosure to Qatar University IP Office, Filed: 3 May 2021.
- [6] KK Sadasivuni, MT Houkan, MR Maurya, JJ Cabibihan, S Al-Maadeed, AMA Ali, Self-Powered Autonomous Robotic Vehicle for Sensing and Capturing Harmful Gases, Invention Disclosure to Qatar University IP Office, Filed: 19 Jan 2021.
- [7] JJ Cabibihan, M Mudassir, A Method for Producing Parametrically Designed 3D Printed Prostheses Using Anthropometric Features, Invention Disclosure to Qatar University IP Office, Filed: 28 Dec 2020.
- [8] JJ Cabibihan, MA Hammami, S Sedrati, Telepresence Control Schemes for Robots in Hazardous Environments, Invention Disclosure to Qatar University IP Office, Filed: 26 Oct 2020.
- [9] KK Sadasivuni, MR Maurya, MT Houkan, JJ Cabibihan, S Al-Maadeed, Fabrication of Self-Sanitizing Reusable Gloves via 3D-Printing and Common Mould Making Method, Invention Disclosure to Qatar University IP Office, Filed: 27 Aug 2020.

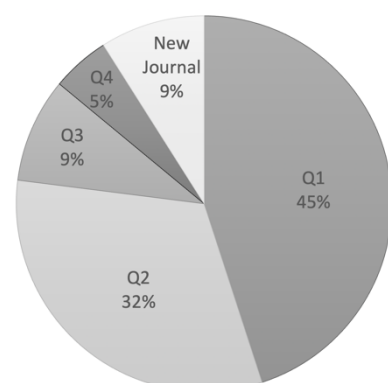
- [10] KK Sadasivuni, MR Maurya, MT Houkan, JJ Cabibihan, S Al-Maadeed, Green Energy Powered-Vapour, Thermal and UV-C Light Assisted Disinfection Technology, Invention Disclosure to Qatar University IP Office, Filed: 17 Aug 2020.
- [11] JJ Cabibihan, A Gaballa, Joint Centers Method for Acquiring Human Hand Anthropometry in an Unconstrained Pose, Invention Disclosure to Qatar University IP Office, Filed: 1 July 2020.
- [12] JJ Cabibihan, A Gaballa, M Mudassir, Multifunctional Tooling Apparatus with Non-Anthropomorphic Construction, Invention Disclosure to Qatar University IP Office, Filed: 30 September 2019.
- [13] JJ Cabibihan, KK Sadasivuni, A Tahir, J Abinahed, N Navkar, AA Al-Ansari, Tactile Sensor for Surgical Tooltips based on Polyurethane-Zinc Oxide Nanocomposite, Invention Disclosure to Qatar University IP Office, Filed: 9 July 2018.
- [14] JJ Cabibihan, KK Sadasivuni, Biometric Socks to Monitor Anxiety in Autism Patients, Invention Disclosure to Qatar University IP Office, Filed: 9 August 2017.
- [15] JJ Cabibihan, KK Sadasivuni, AY Alhaddad, Biometrics Liveness Detection through Biocompatible Capacitive Sensor, Invention Disclosure to Qatar University IP Office, Filed: 24 April 2016
- [16] JJ Cabibihan, H Javed, KK Sadasivuni, AY Alhaddad, Smart Robotic Trains for Autism Spectrum Disorder Intervention, Invention Disclosure to Qatar University IP Office, Filed: 6 March 2016.
- [17] JJ Cabibihan, KK Sadasivuni, Self-Powered Wireless Biometric Footwear to Monitor Anxiety in Autism Patients, Invention Disclosure to Qatar University IP Office, Filed: 20 October 2015.
- [18] JJ Cabibihan, N Thakor, Neuromorphic Tactile Sensing System, Invention Disclosure to the National University of Singapore IP Office, Ref: 12253N, Filed: 26 July 2012.

### REFEREED JOURNAL PAPERS

JCR = Clarivate Journal Citation Reports; IF = Impact Factor 2021

Distribution of journal publications: Q1 = 20 (45%); Q2 = 14 (32%); Q3 = 4 (9%); Q4 = 2 (5%); new journal/not ranked = 4 (9%);

- [1] JJ Cabibihan, AY Alhaddad, T Gulrez, WJ Yoon, Influence of Visual and Haptic Feedback on the Detection of Threshold Forces in a Surgical Grasping Task, IEEE Robotics and Automation Letters, 2021, 6 (3), 5525-5532 (**JCR Q2; 9/28 in Robotics; ISI IF = 3.741**).
- [2] S Bykkam, DN Prasad, MR Maurya, KK Sadasivuni, K.K, JJ Cabibihan, Comparison Study of Metal Oxides (CeO<sub>2</sub>, CuO, SnO<sub>2</sub>, CdO, ZnO and TiO<sub>2</sub>) Decked Few Layered Graphene Nanocomposites for Dye-Sensitized Solar Cells. Sustainability 2021, 13, 7685 (**JCR Q2; 60/125 in Environmental Studies; ISI IF = 3.251**).
- [3] E Mahdi Saad, S Gowid, JJ Cabibihan, Rupture of an Industrial GFRP Composite Mitered Elbow Pipe, Polymers, 2021, 13 (9), 1478 (**JCR Q1; 18/88 in Polymer Science; ISI IF = 4.329**).



- [4] RA Khan, E Mahdi, JJ Cabibihan, Effect of Fibre Orientation on the Quasi-Static Axial Crushing Behaviour of Glass Fibre Reinforced Polyvinyl Chloride Composite Tubes, *Materials*, *Materials* 14 (9), 2235 (**JCR Q2; 152/335 in Materials Science; ISI IF = 3.623**).
- [5] O Laban, E Mahdi, S Samim, JJ Cabibihan, A Comparative Study between Polymer and Metal Additive Manufacturing Approaches in Investigating Stiffened Hexagonal Cells, *Materials* 14 (4), 883 (**JCR Q2; 152/335 in Materials Science; ISI IF = 3.623**).
- [6] JJ Cabibihan, F Alkhatib, M Mudassir, LA Lambert, OS Al-Kwafi, K Diab and E Mahdi, Suitability of the Openly Accessible, Body-Powered 3D Printed Prosthetic Hands for Children, *Frontiers in Robotics and AI*, 2021, 7, 207.
- [7] O Laban, E Mahdi, JJ Cabibihan, Prediction of Neural Space Narrowing and Soft Tissue Injury of the Cervical Spine Concerning Head Restraint Arrangements in Traffic Collisions, *Applied Sciences*, 2021, 11 (1), 145 (**JCR Q2; 38/91 in Multidisciplinary Engineering; ISI IF = 2.679**).
- [8] AY Alhaddad, JJ Cabibihan, A Bonarini, Influence of Reaction Time in the Response of a Companion Robot to a Child's Aggressive Interaction, *International Journal of Social Robotics*, 2020, 12, 1279-1291, (**JCR Q1; 6/28 in Robotics; ISI IF = 5.126**).
- [9] D Thatikayala, D Ponnamma, KK Sadasivuni, JJ Cabibihan, AK Al-Ali, RA Malik, B Min, Progress of Advanced Nanomaterials in the Non-Enzymatic Electrochemical Sensing of Glucose and H<sub>2</sub>O<sub>2</sub>. *Biosensors*, 10(11), 151, 2020 (**JCR Q1; 8/64 in Instruments & Instrumentation; ISI IF = 5.519**).
- [10] KK Sadasivuni, P Saha, J Adhikari, K Deshmukh, MB Ahamed, JJ Cabibihan, Recent advances in mechanical properties of biopolymercomposites: A review, *Polymer Composites*, 2019, 41(1) 32-59 (**JCR Q1; 8/64 in Instruments & Instrumentation; ISI IF = 3.171**).
- [11] AY Alhaddad, JJ Cabibihan, A Hayek, A Bonarini, Influence of the shape and mass of a small robot when thrown to a dummy human head, *Springer Nature Applied Sciences*, 1(11), 1468, 2019.
- [12] A Nakagawa-Silva, NV Thakor, JJ Cabibihan, AB Soares, A bio-inspired slip detection and reflex-like suppression method for robotic manipulators, *IEEE Sensors Journal*, 19 (24), 12443-12453, 2019 (**JCR Q2; rank: 20/64 in Instrumentation; ISI IF = 3.301**).
- [13] AY Alhaddad, JJ Cabibihan, A Hayek, A Bonarini, Safety experiments for small robots investigating the potential of soft materials in mitigating the harm to the head due to impacts, *SN Applied Sciences*, 1 (5), 456, 2019.
- [14] D Ponnamma, JJ Cabibihan, M Rajan, SS Pethaiah, K Deshmukh, JP Gogoi, SKK Pasha, MB Ahamed, J Krishnegowda, BN Chandrashekar, AR Polu, C Cheng, Synthesis, optimization and applications of ZnO/polymer nanocomposites, *Materials Science and Engineering: C – Materials for Biological Applications*, vol 98, May 2019, 1210-1240 (**JCR Q1; rank: 7/46 in Materials Science, Biomaterials; ISI IF = 7.328**).
- [15] KK Sadasivuni, JJ Cabibihan, K Deshmukh, S Goutham, MK Abubasha, JP Gogoi, I Klemenoks, G Sakale, BS Sekhar, PS Rama Sreekanth, KV Rao, M Knite, A review on porous polymer composite materials for multifunctional electronic applications, *Polymer-Plastics Technology and Engineering*, vol 58, issue 12, 1253-1294, 2019 (**JCR Q1; rank: 7/46 in Materials Science, Biomaterials; ISI IF = 7.328**).
- [16] AY Alhaddad, JJ Cabibihan, A Bonarini, Head Impact Severity Measures for Small Social Robots Thrown during Meltdown in Autism, *International Journal of Social Robotics*, Nov 2018, vol 11, issue 2, 255-270 (**JCR Q1; 6/28 in Robotics; ISI IF = 5.126**).
- [17] D Ponnamma, S Goutham, KK Sadasivuni, KV Rao, JJ Cabibihan, MAA Al-Maadeed, Controlling the sensing performance of rGO filled PVDF nanocomposite with the addition of secondary nanofillers, *Synthetic Metals*, 2018, 243, 34-43 *Synthetic Metals* 2019 (**JCR Q2; rank: 29/90 in Polymer Science; ISI IF = 3.266**).
- [18] JJ Cabibihan, MK Abubasha, N Thakor, A Method for 3D Printing Patient-Specific Prosthetic

- Arms with High Accuracy Shape and Size, IEEE Access, 2018 **(JCR Q2; rank: 94/273 in Engineering, Electrical & Electronic; ISI IF = 3.367)**.
- [19] D Thomas, KK Sadasivuni, S Waseem, B Kumar, JJ Cabibihan, Synthesis, green emission and photosensitivity of Al-doped ZnO film, Microsystem Technologies, 2018, pp. 1-5 2018 **(JCR Q3; IF = 2.276; rank: 153/273 in Engineering, Electrical & Electronic)**.
- [20] D Thomas, A Thomas, AE Tom, KK Sadasivuni, D Ponnamma, S Goutham, JJ Cabibihan, KV Rao, Highly Selective Gas Sensing Property of Photo-activated ZnO/PANI thin film synthesized by mSILAR, Synthetic Metals, 2017, 232, 123-130 **(JCR Q2; rank: 29/90 in Polymer Science; ISI IF = 3.266)**.
- [21] D Thomas, KA Vijayalakshmi, JJ Mathen, S Augustine, D Ponnamma, KK Sadasivuni, JJ Cabibihan, Microtron Irradiation Induced Tuning of Dielectric Properties of Nano ZnO–Natural Rubber Disks, Polymer Bulletin, 2017 **(JCR Q2; rank: 40/88 in Polymer Science; ISI IF = 2.870)**.
- [22] D Thomas, KA Vijayalakshmi, KK Sadasivuni, A Thomas, D Ponnamma, JJ Cabibihan, A Fast Responsive Ultraviolet Sensor from mSILAR-Processed Sn-ZnO, Journal of Electronic Materials, 2017, vol. 46, issue 11, pp 6480-6487 **(JCR Q3; rank: 174/273 Engineering, Electrical & Electronic; ISI IF = 1.938)**.
- [23] JJ Cabibihan and SS Chauhan, Physiological Responses to Affective Tele-Touch during Induced Emotional Stimuli, IEEE Transactions on Affective Computing, 2017 **(JCR Q1; rank: 9/140 in Computer Science, Artificial Intelligence; IF = 10.506)**.
- [24] S Goutham, D Kumar, S Devarai, KK Sadasivuni, JJ Cabibihan, K Rao, V Kalagadda, Nanostructure ZnFe<sub>2</sub>O<sub>4</sub> with Bacillus Subtilis for Detection of LPG at Low Temperature, Journal of Electronic Materials, April 2017, vol. 46, issue 4, pp 2334-2339 **(JCR Q3; rank: 174/273 Engineering, Electrical & Electronic; ISI IF = 1.938)**.
- [25] JJ Cabibihan, H Javed, M Aldosari, TW Frazier, H Elbashir, Sensing Technologies for Autism Spectrum Disorder Screening and Intervention, Sensors, 2016 **(JCR Q1; 16/64 in Instruments & Instrumentation; IF = 3.576)**.
- [26] WC So, MKY Wong, JJ Cabibihan, CKY Lam, RYY Chan, HH Qian, Using Robot Animation to Promote Gestural Skills in Children with Autism Spectrum Disorders, Journal of Computer Assisted Learning, 2016 **(JCR Q1; 45/264 in Education & Education Research; IF = 3.862)**.
- [27] D Thomas, S Augustine, KK Sadasivuni, D Ponnamma, AY Alhaddad, JJ Cabibihan, KA Vijayalakshmi, Microtron Irradiation Induced Tuning of Band Gap and Photoresponse of Al-ZnO Thin Films Synthesized by mSILAR, Journal of Electronic Materials, Oct 2016, vol 45, issue 10, pp 4847-4853 **(JCR Q3; rank: 174/273 Engineering, Electrical & Electronic; ISI IF = 1.938)**.
- [28] Y Chen, Y Zilberman, SK Ameri, WJ Yoon, JJ Cabibihan, S Sonkusale, A Flexible Gastric Gas Sensor Based on Functionalized Optical Fiber, IEEE Sensors Journal, 2016 **(JCR Q2; rank: 18/64 in Instrumentation; ISI IF = 3.301)**.
- [29] D Ponnamma, KK Sadasivuni, JJ Cabibihan, WJ Yoon and B Kumar, Reduced Graphene Oxide Filled Poly(Dimethyl Siloxane) Based Transparent Stretchable, and Responsive Sensors, Applied Physics Letters, vol 108, issue 17, 2016 **(JCR Q1; rank: 40/170 in Physics Applied; ISI IF = 3.791)**.
- [30] T Gulrez, A Tognetti, M Kavakli, WJ Yoon, JJ Cabibihan, A Hands-Free Interface for Controlling Virtual Electric-Powered Wheelchair, International Journal of Advanced Robotic Systems, 2016 **(JCR Q4; rank: 24/28 in Robotics; ISI IF = 1.652)**.
- [31] A Wykowska, J Kajopoulos, M Obando-Leitón, SS Chauhan, JJ Cabibihan and G Cheng, Humans are well tuned to detecting agents among non-agents: Examining the sensitivity of human perception to behavioral characteristics of intentional systems, International Journal of Social Robotics, Nov 2015 **(JCR Q1; 6/28 in Robotics; ISI IF = 5.126)**.
- [32] J Ham, RH Cuijpers, JJ Cabibihan, Combining Robotic Persuasive Strategies: The Persuasive

- Power of a Storytelling Robot that Uses Gazing and Gestures, *International Journal of Social Robotics*, Aug 2015 (**JCR Q1; 6/28 in Robotics; ISI IF = 5.126**).
- [33] JJ Cabibihan, D Joshi, YM Srinivasa, MA Chan, and A Muruganantham, Illusory Sense of Human Touch from a Warm and Soft Artificial Hand, *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, May 2015, vol. 23, no. 3, 517-527 (**JCR Q1; 7/68 in Rehabilitation; IF = 3.802**).
- [34] JJ Cabibihan, SS Chauhan, and S Suresh, Effects of the Artificial Skin's Thickness on the Subsurface Pressure Profiles of Flat, Curved, and Braille Surfaces, *IEEE Sensors Journal*, 2014, vol 14, no. 7, 2118-2128 (**JCR Q2; rank: 18/64 in Instrumentation; ISI IF = 3.301**).
- [35] JJ Cabibihan, H Javed, MH Ang Jr, SM Aljunied, Why robots? A Survey on the Roles and Benefits of Social Robots in the Therapy of Children with Autism, *International Journal of Social Robotics*, Aug 2013 (**JCR Q1; 6/28 in Robotics; ISI IF = 5.126**).
- [36] JJ Cabibihan, WC So, S Pramanik, Human-Recognizable Robotic Gestures, *IEEE Trans on Autonomous Mental Development*, 2012, vol 4, 1:305-314 (**JCR Q1; 30/132 in Computer Science, Artificial Intelligence; ISI IF = 2.889**).
- [37] JJ Cabibihan, WC So, S Saj, Z Zhang, Telerobotic Pointing Gestures Shape Human Spatial Cognition, *International Journal of Social Robotics*, 2012, vol 4, 3: 263-272 (**JCR Q1; 6/28 in Robotics; ISI IF = 5.126**).
- [38] MJ Ali, S Sarkar, P Kumar, JJ Cabibihan, A Non-Intrusive Human Fatigue Monitoring System, *International Journal of Future Computer and Communication*, vol. 1, no. 3, 2012.
- [39] JJ Cabibihan, Patient-Specific Prosthetic Fingers by Remote Collaboration—A Case Study, *PLoS ONE*, 2011, 6(5): e19508, (**JCR Q2; 27/71 in Multidisciplinary Sciences; IF = 2.740**).
- [40] JJ Cabibihan, R Pradipta, SS Ge, Prosthetic finger phalanges with lifelike skin compliance for low-force social touching interactions, *Journal of NeuroEngineering and Rehabilitation*, 2011, vol. 8, no. 16, (Highly Accessed, 1000+ views after its 1st month of publication; #13 of the journal's most accessed with 2,826 views from March 2011-March 2012; Media coverage in *New Scientist*; **JCR Q1; 5/68 in Rehabilitation; IF = 3.519**).
- [41] S Salehi, JJ Cabibihan, SS Ge, Artificial Skin Ridges Enhance Tactile Shape Discrimination, *Sensors*, 2011, vol. 11, no. 9, 8626-8642. (Media coverage in *Popular Science*, *Discovery Channel News*, *New Scientist*, *MIT Technology Review*; **JCR Q1; 16/64 in Instruments & Instrumentation; IF = 3.576**).
- [42] JJ Cabibihan, S. Pattofatto, M. Jomaa, A. Benallal and M. C. Carrozza. Towards humanlike social touch for sociable robotics and prosthetics: Comparisons on the compliance, conformance and hysteresis of synthetic and human fingertip skins, *Inaugural Issue of the International Journal of Social Robotics* (2009) 1: 29-40, (Highly cited; within the top 10 of the journal for citations; Media coverage in *MIT Technology Review*, *New Scientist*; **JCR Q1; 6/28 in Robotics; ISI IF = 5.126**).
- [43] B. B. Edin, L. Ascari, L. Beccai, S. Roccella, JJ Cabibihan, and M. C. Carrozza, Bio-inspired sensorization of a biomechatronic robot hand for the grasp-and-lift task, *Brain Research Bulletin*, 2008, vol. 75, no. 6, 785-795; (**JCR Q2; 112/273 in Neurosciences; ISI IF = 4.077**).
- [44] S. Roccella, M.C. Carrozza, G. Cappiello, JJ Cabibihan, C. Laschi, P. Dario, H. Takanobu, M. Matsumoto, H. Miwa, K. Itoh, A. Takanishi, Design and Development of Five Fingereed Hands for a Humanoid Emotion Expression Robot, *International Journal of Humanoid Robotics*, 2007, vol. 4, no. 1, 181-206 (**JCR Q4; 25/28 in Robotics; ISI IF = 1.616**).

#### DATA SETS AND TEST RIGS

- [1] AY Alhaddad, JJ Cabibihan, A Bonarini Datasets for recognition of aggressive interactions of children toward robotic toys, *Data in brief*, 2021, vol 34.
- [2] AY Alhaddad, JJ Cabibihan, A Hayek, A Bonarini, Datasets for recognition of aggressive

- interactions of children toward robotic toys. Data in Brief, 2020.
- [3] F Alkhatib, JJ Cabibihan, E Mahdi, Data for Benchmarking Low-Cost, 3D Printed Prosthetic Hands, Data in Brief, 2020.
  - [4] AY Alhaddad, JJ Cabibihan, A Hayek, A Bonarini, A low-cost test rig for impact experiments on a dummy head, HardwareX, vol 6, Oct 2019, 1-15.
  - [5] AY Alhaddad, JJ Cabibihan, A Hayek, A Bonarini, Data on the impact of objects with different thicknesses of different soft materials at different velocities on a dummy head, Data in Brief, vol 24, June 2019, 1-5.
  - [6] AY Alhaddad, JJ Cabibihan, A Hayek, A Bonarini, Data on the impact of objects with different shapes, masses, and impact velocities on a dummy head, Data in Brief, vol 22, Feb 2019, 344-348.

### **REFEREED PUBLICATIONS FOR TEACHING AND EDUCATION**

- [1] JJ Cabibihan, RO Reda and M Abdulwahed, Visualization Skills of Engineering Students: Action Research Approach, and Comparative Gender Analysis, World Engineering Education Forum, Nov 2016, Korea.
- [2] JJ Cabibihan, Effectiveness of student engagement pedagogies in a mechatronics module: A 4-year multi-cohort study, Asian Journal of the Scholarship of Teaching and Learning (formerly the Journal of the National University of Singapore Teaching Academy), Nov 2013, 3(4), 125-149.

### **EDITORIALS IN JOURNAL SPECIAL ISSUES**

- [1] A Kheddar, H He, JJ Cabibihan, E Yoshida and F Eysel, Embodied Interactive Robots, 2021, vol. 13, 3: 420-430.
- [2] T Inamura, AK Pandey, S Kumar, MA Williams, JJ Cabibihan, L Behera, Special Issue on Robot and Human Interactive Communication 2020 (Part II), Advanced Robotics 34 (24), 1545-1545.
- [3] T Inamura, AK Pandey, S Kumar, MA Williams, JJ Cabibihan, L Behera, Special Issue on Robot and Human Interactive Communication 2020, Advanced Robotics 34 (20), 1279-1279.
- [4] A Agah, JJ Cabibihan, A Howard, MA Salichs and H He, Sociorobotics, International Journal of Social Robotics, 2018, vol. 10, 2: 177-178.
- [5] JJ Cabibihan, MA Williams and R Simmons, When Robots Engage Humans, International Journal of Social Robotics, 2014, vol 6, 3: 311-313.
- [6] H Li, JJ Cabibihan and YK Tan, Towards an Effective Design of Social Robots, International Journal of Social Robotics, 2011, vol 3, 4: 333-335.

### **BOOKS**

- [1] MA Salichs, SS Ge, E Barakova, JJ Cabibihan, AR Wagner, A Castro-González, H He, Social Robotics, Springer Berlin Heidelberg, ISBN 978-3-030-35888-4, 2019.
- [2] SS Ge, JJ Cabibihan, M Salichs, E Broadbent, H He, A Wagner, A Castro, Social Robotics: Springer, Cham Switzerland, ISBN 978-3-030-05203-4, 2018.

- [3] A Kheddar, E Yoshida, SS Ge, K Suzuki, JJ Cabibihan, F Eyszel, H He. Social Robotics: Springer, Cham Switzerland, ISBN 978-3-319-70021-2, 2017.
- [4] KK Sadasivuni, D Ponnamma, JJ Cabibihan, MA Al-Maaded, Editors. Smart Polymer Nanocomposites: Energy Harvesting, Self-Healing, and Shape Memory, Springer, ISBN 978-3-319-50423-0, 2017.
- [5] A Agah, JJ Cabibihan, AM Howard, M Salichs, H He. Social Robotics: Springer, Cham Switzerland, ISBN 978-3-319-47436-6, 2016.
- [6] KK Sadasivuni, D Ponnamma, J Kim, JJ Cabibihan, MA Al-Maaded, Editors. Biopolymer Composites in Electronics, Elsevier, ISBN 978-0-12-809261-3, 2016.
- [7] SS Ge, O Khatib, JJ Cabibihan, R Simmons, MA Williams. Social Robotics: Springer Berlin Heidelberg, ISBN 978-3-642-34102-1, 2012
- [8] SS Ge, H Li, JJ Cabibihan, YK Tan. Social Robotics: Springer Berlin Heidelberg, ISBN 978-3-642-17247-2, 2010.

### BOOK CHAPTERS

- [1] K Vanni, SE Salin, JJ Cabibihan, T Kanda, Robostress, a new approach to understanding robot usage, technology, and stress, Social Robotics: Springer Berlin/Heidelberg, 2019.
- [2] D Catlin, M Kandlhofer, JJ Cabibihan, JA Angel-Fernandez, S Holmquist, AP Csizmadia, EduRobot Taxonomy. In: L Daniela (ed) Smart Learning with Educational Robotics, Springer, Cham, 2019, pp. 333-338.
- [3] JJ Cabibihan, R Chellali, WC So, M Aldosari, O Connor, AY Alhaddad, H Javed, Social Robots and Wearable Sensors for Mitigating Meltdowns in Autism – A Pilot Test, Social Robotics: Springer Berlin/Heidelberg, 2018.
- [4] KJ Vanni, JJ Cabibihan, SE Salin, Attitudes of Heads of Education and Directors of Research towards the Need for Social Robotics Education in Universities, Social Robotics: Springer Berlin/Heidelberg, 2018.
- [5] AY Alhaddad, H Javed, O Connor, B Banire, D Al Thani, JJ Cabibihan, Robotic Trains as an Educational and Therapeutic Tool for Autism Spectrum Disorder Intervention, Robotics in Education: Springer International Publishing, Sept 2018.
- [6] D Catlin, M Kandlhofer, S Holmquist, AP Csizmadia, J Angel-Fernandez, JJ Cabibihan, EduRobot Taxonomy and Papert’s Paradigm, Constructionism, Vilnius, Lithuania, Aug 2018.
- [7] AY Alhaddad, SE Al Khatib, RA Khan, SM Ismail, AS Shehadeh, AM Sadeq and JJ Cabibihan, Towards 3D Printed Prosthetic Hands that can Satisfy Psychosocial Needs: Grasping Force Comparisons between a Prosthetic Hand and Human Hands, Social Robotics: Springer Berlin/Heidelberg, 2017.
- [8] D Thomas, JJ Cabibihan, S Kumar, SKK Pasha, D Mandal, M Laad, BC Yadav, SI Patil, A Ghule, P Mazumdar, S Rattan, KK Sadasivuni, Biodegradable Nanocomposites for Energy Harvesting, Self-healing, and Shape Memory. In D Ponnamma, KK Sadasivuni, JJ Cabibihan, and MA Al-Maadeed, Editors. Smart Polymer Nanocomposites: Energy Harvesting, Self-Healing and Shape Memory Applications, Springer Cham, 2017.
- [9] JJ Cabibihan, M Khaleel, KK Sadasivuni, Recovery Behavior of Artificial Skin Materials after Object Contact, Social Robotics: Springer Berlin/Heidelberg, 2016.
- [10] H Javed, JJ Cabibihan, M Aldosari and A Al-Attiyah, Culture as a Driver for the Design of Social Robots for Autism Spectrum Disorder Interventions in the Middle East, Social Robotics: Springer Berlin/Heidelberg, 2016.

- [11] KK Sadasivuni, AY Al Haddad, H Javed, WY Yoon and JJ Cabibihan, Strain, Pressure, Temperature, Proximity, and Tactile sensors from Biopolymer composites. In KK Sadasivuni, D Ponnamma, JJ Cabibihan, MA Al-Maaded, J Kim, Editors. Biopolymer Composites in Electronics, Elsevier, ISBN 978-0-12-809261-3, 2016.
- [12] KK Sadasivuni, JJ Cabibihan, MA Al-Maadeed, NMR spectroscopy of polymer composites. In S Thomas, D Rouxel and D Ponnamma, editors. Spectroscopy of Polymer Nanocomposites: Elsevier, 2016, p. 181-201.
- [13] KK Sadasivuni, D Ponnamma, JJ Cabibihan, MA AlMa'adeed, Electronic Applications of Polydimethylsiloxane and Its Composites, Flexible and Stretchable Electronic Components: Springer Switzerland, 2016, p. 199-228.
- [14] L Diep, JJ Cabibihan and G Wolbring, Social robotics through an anticipatory governance lens, Social Robotics: Springer Berlin/Heidelberg, 2014, p. 115-124.
- [15] J Ham, M van Esch, Y Limpens, J de Pee, JJ Cabibihan, SS Ge, The Automaticity of Social Behavior towards Robots: The Influence of Cognitive Load on Interpersonal Distance to Approachable versus Less Approachable Robots, Social Robotics: Springer Berlin/Heidelberg, 2012, p. 15-25.
- [16] JJ Cabibihan, L Zheng, CKT Cher, Affective Tele-Touch, Social Robotics: Springer Berlin/Heidelberg, 2012, p. 348-356.
- [17] J Ham, R Bokhorst, R Cuijpers, D van der Pol and JJ Cabibihan, Making Robots Persuasive: The Influence of Combining Persuasive Strategies (Gazing and Gestures) by a Storytelling Robot on Its Persuasive Power, Social Robotics: Springer Berlin / Heidelberg, 2011. p. 71-83.
- [18] JJ Cabibihan, W Yusson, S Salehi, SS Ge. Minimal Set of Recognizable Gestures for a 10 DOF Anthropomorphic Robot. In: SS Ge, H Li, JJ Cabibihan, YK Tan, editors. Social Robotics: Springer Berlin / Heidelberg, 2010. p. 63-70.
- [19] JJ Cabibihan, R Jegadeesan, S Salehi, SS Ge. Synthetic Skins with Humanlike Warmth. In: SS Ge, H Li, JJ Cabibihan, YK Tan, editors. Social Robotics: Springer Berlin / Heidelberg, 2010. p. 362-371.
- [20] JJ Cabibihan, SS Ge. Synthetic Finger Phalanx with Lifelike Skin Compliance. In: H Liu, H Ding, Z Xiong, X Zhu, editors. Intelligent Robotics and Applications: Springer Berlin / Heidelberg, 2010. p. 498-504.
- [21] JJ Cabibihan, R. Pradipta, Y.Z. Chew, S.S. Ge, Towards humanlike social touch for prosthetics and sociable robotics: Handshake experiments and finger phalange indentations, in Advances in Robotics, J.H. Kim, S.S. Ge et al, Eds. Springer: Berlin / Heidelberg, vol 5744, pp. 73-79, 2009.
- [22] JJ Cabibihan, S.S. Ge, Towards humanlike social touch for prosthetics and sociable robotics: Three-dimensional finite element simulations of synthetic finger phalanges, in Advances in Robotics, J.H. Kim, S.S. Ge et al, Eds. Springer: Berlin / Heidelberg, vol 5744, pp. 80-86, 2009
- [23] JJ Cabibihan, WC So, MA Nazar, SS Ge, Pointing gestures for robot-mediated communication interface, in Intelligent Robotics and Applications, M. Xie et al, Eds. Springer: Berlin / Heidelberg, vol 5928, pp. 67-77, 2009 \*\*Finalist for Best Paper Award.

#### REFEREED CONFERENCE PAPERS

- [1] AY Qadeib Alban, M Ayesha, AY Alhaddad, A Al-Ali, WC So, OB Connor, JJ Cabibihan, Detection of Challenging Behaviours of Children with Autism Using Wearable Sensors During Interactions with Social Robots, IEEE International Conference on Robot-Human Interactive Communications (Ro-Man), Vancouver, Canada, 2021.
- [2] A Gaballa, LA Lambert, K Diab, JJ Cabibihan, Image Processing of 3D Scans for Upper Limb Prosthesis of the War-Wounded, IEEE 20th International Conference on Bioinformatics and



- Bioengineering (BIBE), Cincinnati, OH, USA, pp. 596--601, 2020.
- [3] AY Alhaddad, JJ Cabibihan, A Hayek, A Bonarini, Recognition of Aggressive Interactions of Children Toward Robotic, IEEE International Conference on Robot-Human Interactive Communications, New Delhi, India, 2019.
  - [4] F Alkhatib, E Mahdi and JJ Cabibihan, Design and Analysis of Flexible Joints for a Robust 3D Printed Prosthetic Hand, IEEE International Conference on Rehabilitation Robotics (IEEE ICORR), Toronto, Canada, June 2019.
  - [5] A Nakagawa-Silva, SPR Sunkesula, A Prach, JJ Cabibihan, NV Thakor, AB Soares, Slip suppression in prosthetic hands using a reflective optical sensor and MPI controller, IEEE Biomedical Circuits and Systems Conference (BioCAS), Cleveland, Ohio, Oct 2018.
  - [6] JJ Cabibihan, KK Sadasivuni, A Tahir, S Waseem, J Abinahed, N Navkar, A Al-Ansari, Graphene-filled PDMS Composite for Tactile Sensing of Surgical Graspers, IEEE International Conference on Nanotechnology (IEEE NANO), Cork, Ireland, July 2018.
  - [7] A Tahir, J Abinahed, N Navkar, KK Sadasivuni, A Al-Ansari, JJ Cabibihan, Experimental characterization of a tactile sensor for surgical applications, IEEE International Conference on Innovative Research and Development, Bangkok, Thailand, May 2018.
  - [8] A Prach, JJ Cabibihan, NV Thakor, and DS Bernstein, Pareto-Front Analysis of a Monotonic PI Control Law for Slip Suppression in a Robotic Manipulator, IEEE International Conference on Robotics and Biomimetics (IEEE ROBIO), Macau, China, Dec. 2017.
  - [9] D Thomas, S Augustine, KK Sadasivuni and JJ Cabibihan, Effect of synthesis conditions on ZnO thin film Photosensitivity via mSILAR technique, IEEE International Conference on Nanotechnology (IEEE NANO), Pittsburgh, PA, USA, July 2017.
  - [10] KK Sadasivuni, MT Houkan, MS Taha, and JJ Cabibihan, Anti-Spoofing Device for Biometric Fingerprint Scanners, International Conference on Mechatronics and Automation (IEEE ICMA), Takamatsu, Japan, Aug 2017.
  - [11] X Ye, JJ Cabibihan, WJ Yoon, Design and Verification of a Flexible Steering Mechanism of a Tethered Capsule Endoscope in the Stomach, in Proc of the 14th International Conference on Ubiquitous Robots and Ambient Intelligence (URAI), Jeju, Korea, July 2017.
  - [12] KY Lam, MK Wong, JJ Cabibihan, HY Chan, C Wong, TZ Lee, P Ng, TF Chui, W Leung, CH Chan, WC So, Using an animated social robot to promote gestural recognition and production skills in children with Autism Spectrum Disorders. Conference of the International Society for Gesture Studies, Paris, France, 2016.
  - [13] M Rasouli, K Chellamuthu, JJ Cabibihan, SL Kukreja, Towards Enhanced Control of Upper Prosthetic Limbs: A Force-Myographic Approach, IEEE International. Conference on Biomedical Robotics and Biomechatronics (IEEE BIOROB), Singapore, June 2016.
  - [14] S Teja, J Mekie, JJ Cabibihan, NV Thakor, SL Kukreja, Fault Tolerant Tactile Sensor Arrays for Prosthesis, IEEE International. Conference on Biomedical Robotics and Biomechatronics (IEEE BIOROB), Singapore, June 2016.
  - [15] AM El Noamany, AN Pakari, AM Salem, MI Saleh, and JJ Cabibihan, Design and Experiments on a Personalized Prosthetic Finger, Arab Robotics Conference, Doha, Qatar, 2016.
  - [16] H Javed and JJ Cabibihan, Cultural Relevance and Culturally Adaptive Robots for Autism Interventions in Qatar, Arab Robotics Conference, Doha, Qatar, 2016.
  - [17] H Javed, JJ Cabibihan, and AA Al-Attiyah, Autism in the Gulf States: Why Social Robotics is the Way Forward, International Conference on Information and Communication Technology and Accessibility, Marrakech, Morocco, 2015.
  - [18] H Javed, OB Connor, JJ Cabibihan, Thomas and Friends: Implications for the Design of Social Robots and their Role as Social Story Telling Agents for Children with Autism, IEEE International Conference on Robotics and Biomimetics (IEEE ROBIO), Zhuhai, China, 2015.

- [19] HT Teo, JJ Cabibihan, Towards Soft, Robust Robots for Children with Autism Spectrum Disorder, Path to Success: Failures in Real Robots, IEEE International Conference on Intelligent Robotics and Systems (IEEE IROS), Hamburg, Germany, 2015.
- [20] L Diep, JJ Cabibihan and G Wolbring, Social robots: Views of special education teachers, ICTs for Improving Patients Rehabilitation Research Techniques, Lisbon, Portugal, 2015.
- [21] X Ye, C Hasson, WJ Yoon, JJ Cabibihan, Design of a Steering Mechanism for a Tethered Capsule Endoscope, IEEE International Conference on Robotics, Automation, and Mechatronics (RAM), Angkor Wat, Cambodia, 2015. \*\*Finalist for Best Student Paper Award
- [22] Y Chen, S Kabiri, WJ Yoon, JJ Cabibihan and S Sonkusale, Functionalized optical fiber sensor platform for detection of gastric ammonia and carbon dioxide for early screening of stomach disease, International Conference on Label-Free Technologies, Boston, Massachusetts, 2015.
- [23] Y Luo, LF Cheong and JJ Cabibihan, Modeling the Temporality of Saliency, Asian Conference on Computer Vision, Singapore, 2014.
- [24] JJ Cabibihan, KW Wu, A Ramalingam, Tactile Sensing in an Object Passing Task, IEEE International Conference on Cybernetics and Intelligent Systems (CIS), Manila, Philippines, 2013.
- [25] A Anand, J Mathew, SPR Krishna, S Paul, B Ramesh, C Xiang, and JJ Cabibihan, Object shape discrimination using sensorized gloves, IEEE International Conference on Control and Automation (IEEE ICCA), Hangzhou, China, 2013.
- [26] TK George, HM Gadhia, R Sukumar and JJ Cabibihan, Sensing discomfort of standing passengers in public rail transportation systems using a smart phone, IEEE International Conference on Control and Automation (IEEE ICCA), Hangzhou, China, 2013.
- [27] WW Lee, JJ Cabibihan and NV Thakor, Biomimetic strategies for tactile sensing, IEEE Sensors Conference, Baltimore, USA, 2013.
- [28] JJ Cabibihan, LO Htun, S Salehi, Effect of Artificial Skin Ridges on Embedded Tactile Sensors, IEEE Haptics Symposium, Vancouver, Canada, 2012.
- [29] JJ Cabibihan and MC Carrozza, Influence of the Skin Thickness on Tactile Shape Discrimination, IEEE International Conference on Biomedical Robotics and Biomechatronics, Rome, Italy, 2012.
- [30] TD Hoa, JJ Cabibihan, Cute and Soft: Baby Steps in Designing Robots for Children with Autism, Workshop at SIGGRAPH Asia, Singapore, 2012.
- [31] JJ Cabibihan, I Ahmed, SS Ge, Force and motion analyses of the human patting gesture for robotic social touching, IEEE International Conference on Cybernetics and Intelligent Systems (CIS), 2011, Qingdao, China
- [32] SS Ge, JJ Cabibihan, Z Zhang, Y Li, C Meng, H He, MR Safizadeh, YB Li, and J Yang, Design and Development of Nancy, a Social Robot, in Proc of the 8th International Conference on Ubiquitous Robots and Ambient Intelligence, Incheon, Korea, 2011.
- [33] A.A.P. Wai, Y.W. Kow, F.S. Fook, M. Jayachandran, J. Biswas and JJ Cabibihan, Sleeping Patterns Observation for Bedsores and Bed-side Falls Prevention, IEEE International Conference on Engineering in Medicine and Biology, Minnesota, USA, 2-6 Sept. 2009.
- [34] JJ Cabibihan, S.S. Ge, The influence of internal geometry modifications on the skin compliance behavior of an anthropomorphic fingertip, 4th International Conference Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), Mar. 12 -15, 2009.
- [35] JJ Cabibihan, Design of Prosthetic Skins with Humanlike Softness, 13th International Conference on Biomedical Engineering, Singapore, Dec. 3-6, 2008.
- [36] JJ Cabibihan, M.C. Carrozza, P. Dario, S. Pattofatto, M. Jomaa and A. Benallal, "The Uncanny Valley and the search for humanlike skin materials for a prosthetic fingertip," IEEE-RAS International Conference on Humanoid Robots, Genova, Italy, Dec. 4-6, 2006.

- [37] JJ Cabibihan, M.C. Carrozza, P. Dario, S. Pattofatto, M. Jomaa and A. Benallal, "The Uncanny Valley and the grand challenges towards a humanlike fingertip skin prosthetics," (workshop poster) Robotics: Science and Systems, Philadelphia, USA, Aug. 16-19, 2006.
- [38] JJ Cabibihan, S. Pattofatto, M. Jomaa, A. Benallal, M.C. Carrozza, P. Dario, The Conformance Test for Robotic/Prosthetic Fingertip Skins, IEEE-RAS-EMBS International Conference on Biomedical Robotics and Biomechatronics, Pisa, Feb. 20-22, 2006.
- [39] B.B. Edin, L. Beccai, L. Ascari, S. Roccella, JJ Cabibihan, M.C. Carrozza, A bioinspired approach for the design and characterization of a tactile sensory system for a cybernetic prosthetic hand, 2006 IEEE/RAS International Conference on Robotics and Automation, Florida, USA, May 15-19, 2006.
- [40] M. Zecca, S. Roccella, M.C. Carrozza, H. Miwa, K. Itoh, G. Cappiello, JJ Cabibihan, M. Matsumoto, H. Takanobu, P. Dario, A. Takanishi, On the development of the Emotion Expression Humanoid Robot WE-4RII with RCH-1, 4th IEEE/RAS International Conference on Humanoid Robots, Nov. 10-12, 2004, Los Angeles, USA.
- [41] S. Roccella, M.C. Carrozza, G. Cappiello, P. Dario, JJ Cabibihan, M. Zecca, H. Miwa, K. Itoh, M. Matsumoto, A. Takanishi, Design, fabrication and preliminary results of a novel anthropomorphic hand for humanoid robotics: RCH-1, 2004 IEEE/RSJ International Conference on Intelligent Robots and Systems, Sendai, Japan, Sept. 28–Oct. 2, 2004.
- [42] M. Zecca, S. Roccella, M.C. Carrozza, H. Miwa, K. Itoh, G. Cappiello, JJ Cabibihan, M. Matsumoto, H. Takanobu, P. Dario, A. Takanishi, On the realization of a novel anthropomorphic hand for humanoid robotics: RoboCasa Hand #1, RSJ Annual Conference, Sept. 15-17, 2004, Gifu, Japan.

#### **CONFERENCE/WORKSHOP ABSTRACTS**

- [1] KJ Vanni, JJ Cabibihan, Economic Evaluation Model for the Purchase of a Social Robot, Workshop on Social Human-Robot Interaction of Service Robots, International Conference on Social Robotics, Qingdao, China, 2018.
- [2] M Rasouli, JJ Cabibihan, N Thakor, A Neuromorphic System for Tactile Pattern Recognition Using Extreme Learning Machine, International Conference on Intelligent Robots and Systems, Vancouver, Canada, 2017.
- [3] KK Sadasivuni, M Taha, M Houkan, M El-Khatib and JJ Cabibihan, PDMS-Graphene Composite for Touch Sensing Applications, 38<sup>th</sup> International Annual Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Orlando, Florida, USA, 2016.
- [4] A Yaser and JJ Cabibihan, Reflex System for Intelligent Robotics, Qatar Foundation Annual Research Conference, Doha, Qatar, 2016.
- [5] X Ye, WJ Yoon, and JJ Cabibihan, Design of a Flexible Tethered Capsule Endoscope, IEEE Life Science Grand Challenges Conference, Abu Dhabi, United Arab Emirates, 2016.
- [6] KK Sadasivuni, WJ Yoon and JJ Cabibihan, Cellulose Nanocrystals (Biomaterial) Based Touch Sensors for Biomedical Applications, IEEE Life Science Grand Challenges Conference, Abu Dhabi, United Arab Emirates, 2016.
- [7] JJ Cabibihan, An Illusion of Lifelike Touch from Prosthetic Hands, Workshop on Assistive Robotics, IEEE International Conference on Intelligent Robotics and Systems (IROS), Chicago, USA, 2014.
- [8] AM Sharafudeen, JJ Cabibihan, UA Qidwai, and L Majed, A Prototype Of Virtually Interactive Hand Activating Devise - Low Cost Portable Head Mounted System (vihad Plus) For Neurological Rehabilitation, Qatar Foundation Annual Research Conference, Doha, Qatar, 2014.

- [9] JJ Cabibihan, Towards Socially-Interactive Telepresence Robots for the 2022 World Cup, Qatar Foundation Annual Research Conference, Doha, Qatar, 2013.
- [10] JJ Cabibihan, Home-Based Rehabilitation System, Qatar Foundation Annual Research Conference, Doha, Qatar, 2013.

### **INVITATIONS TO SPEAK AT CONFERENCES, WORKSHOPS, SEMINARS, GUEST LECTURES**

1. Keynote Speaker, XIII Symposium on Biomedical Engineering (Faculdade de Engenharia Elétrica, Universidade Federal de Uberlândia, Brazil), 14 Sept 2021.
2. Keynote Speaker, Webinar on the Use of Social Robots in Autism Intervention: An Alternative Treatment (Chinese University of Hong Kong), 28 Aug 2021.
3. Keynote Speaker, Robotics for Post-Pandemic Recovery, Webinar on Computer Science, Machine Learning and Artificial Intelligence (Philippine-American Academy of Science and Engineering), 21 July 2021.
4. Plenary Speaker, Engineering Research and Development for Technology Conference (Department of Science and Technology, Philippines), 9 Dec 2020.
5. Invited Speaker, Translational Engineering for Healthcare Innovation and Product Development, Qatar University (Doha, Qatar), 21 Oct 2020.
6. Keynote Speaker, Extreme Reverse Innovation, 3<sup>rd</sup> Human-Robot Interaction (HRI) from Basic Science to New Venture Creation for Social Good, IEEE International Conference on Robot and Human Interactive Communication (RO-MAN; Naples, Italy), 31 Aug 2020.
7. Invited Speaker, QNRF SmartTech Research Outcome Seminar, Neuromorphic Tactile Sensing: A Paradigm Shift for Prosthetics and Surgical Robotics (Doha, Qatar), 25 Nov 2019.
8. Seminar Speaker, Toward Lifelike Touch, Biomedical Engineering Lab, Federal University of Uberlandia (Uberlandia, Brazil), 9 July 2019.
9. Invited Speaker, Workshop on Assistive Technology for ASD Therapy, Qatari Autism Society, (Doha, Qatar), 1 May 2019.
10. Invited Speaker, Hamad Medical Corporation Medical Research Center's Research Forum on Surgical Technologies (Doha, Qatar), 28 April 2019.
11. Plenary Speaker, 9<sup>th</sup> Surgical Research and Innovation Ideas, Ibn Rushd Symposium, Hamad Medical Corporation, Doha, Qatar, 12 April 2019.
12. Invited Speaker, Robots for Everyone, Qatar National Library, 2 Feb 2019.
13. Invited Speaker, Innovation Theater, Gulf Region Education Assistive Technology Conference, Qatar Assistive Technology Center (MADA; Doha, Qatar), 25 April 2018.
14. Seminar Speaker, Healthcare Robotics, Department of Electronics, Information, and Bioengineering, Politecnico di Milano (Milan, Italy), 20 April 2018.
15. Invited Speaker, Workshop on Supporting Individuals with Autism Spectrum Disorder using Technology-based Interventions, Hamad bin Khalifa University (Doha, Qatar), 4 April 2018.
16. Invited Speaker, 5<sup>th</sup> Innovation Breakfast, Qatar Innovation Community and Supreme Committee for Delivery and Legacy (Doha, Qatar), 11 March 2018.
17. Keynote Speaker, International Workshop on Emerging Technologies in Biomedical Engineering and Telemedicine (Doha, Qatar), 18-19 Feb 2018.
18. Invited Speaker, Workshop on Social Robot Intelligence for Social Human-Robot Interaction of Service Robots, International Conference on Social Robotics (Tsukuba, Japan), 22 Nov 2017.
19. Keynote Speaker, 2<sup>nd</sup> Workshop on Behavior Adaptation, Interaction and Learning for Assistive Robotics (BAILAR), IEEE International Conference on Robot and Human Interactive Communication (RO-MAN; Lisbon, Portugal), 28 Aug 2017.

20. Invited Speaker, 1<sup>st</sup> QBRI Autism Symposium, Qatar Biomedical Research Institute, Qatar National Convention Center (Doha, Qatar), 1 May 2017
21. Panel Discussion Speaker, QITCOM 2017, Qatar Ministry of Transportation and Communications (Qatar National Convention Center, Qatar), 8 Mar 2017.
22. Keynote Speaker, Joint UAE Symposium on Social Robotics (Abu Dhabi, United Arab Emirates), 23 Nov 2016.
23. Workshop Speaker, Social Robots: A Tool to Advance Interventions in Autism, International Conference on Social Robotics (Kansas City, MO, USA), 1 Nov 2016.
24. Workshop Speaker, Research on Children Development: New Perspectives and Tools, 38<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society (Florida, USA), 16 August 2018.
25. Invited Speaker, Next-Gen Adaptive and Assistive Technologies for Persons with Disabilities, Autism Society Philippines (Manila, Philippines), 19 July 2016.
26. Invited Speaker, Education Conference, Ministry of Education Qatar (Doha, Qatar), 7 May 2016.
27. Panel Discussion Speaker, Arab Robotics Conference (Doha, Qatar), 14-16 February 2016.
28. Plenary Speaker, Neuroscience Symposium, International Brain Research Organization, Middle East and North Africa (Doha, Qatar), 16-17 December 2015.
29. Guest Lecturer, Georgia Institute of Technology, 20 August 2015 (Host: Prof. Ayanna Howard).
30. Workshop Speaker, Affordable Rehabilitation and Assistive Robotics for Low Resource Settings and Developing Countries, IEEE International Conference on Rehabilitation Robotics (Singapore), 11 August 2015.
31. Workshop Speaker, Social Robots and Health, International Conference on Social Robotics (Sydney, Australia), 27 October 2014.
32. Workshop Speaker, Assistive Robotics, IEEE International Conference on Intelligent Robotics and Systems (Chicago, USA), 14 September 2014.
33. Seminar Speaker, Qatar University Office of Faculty and Instructional Development, (Doha, Qatar), 24 June 2014.
34. TEDx Qatar University (Doha, Qatar), 2 May 2014.
35. Distinguished Lecturer, IEEE Computational Intelligence Society (Manila, Philippines), 24 Nov 2012.
36. Tutorial Speaker, IEEE Region 10 Conference (Cebu City, Philippines), 19 Nov 2012.
37. Workshop Speaker, International Conference on Social Robotics (Chengdu, China), 28 Oct 2012.
38. Plenary Speaker, International Conference on Electrical Science (Tanjavur, India), 14 Sept 2012.
39. Workshop Speaker, Affective Haptics, IEEE Haptics Symposium (Vancouver, Canada), March 2012.
40. Keynote Speaker, Committee on Medical Training Conference, Manila Doctors Hospital (Manila, Philippines), 11 July 2011.
41. Workshop Speaker, Biomaterials in Medicine, Agency for Science, Technology and Research (Singapore), 12 Nov 2011.
42. Workshop Speaker, Roundtable for Robotics in Healthcare, Institute of Infocomm Research, Agency for Science, Technology and Research (Singapore), 8 October 2009.
43. Tutorial Speaker, 4th International Conference Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (Manila, Philippines), 12 Mar 2009.
44. Seminar Speaker, Philippine General Hospital, Department of Rehabilitation Medicine (Manila, Philippines), 29 January 2008.

## **DEMONSTRATIONS, EXHIBITIONS, AND ROBOTIC ART INSTALLATIONS**

1. Exclusive invitation for exhibition of the UV Disinfection Robot with Telepresence Control at the St. Petersburg International Economic Forum (attended by President Vladimir Putin and His Highness Emir Tamim bin Hamad Al Thani), Qatar Pavilion, Russia, 2-5 June 2021.
2. Public demonstration of social robots during Qatar National Day at the Qatar University pavilion, December 2019, 2017, and 2016.
3. Permanent exhibition of the NPRP7 project on prosthetic arm with tactile nanosensors at the College of Engineering, Qatar University, 2019-present.
4. Invited demonstration of the NPRP7 project on prosthetic arm with tactile nanosensors during the Times Higher Education (THE) Emerging Economies Summit, Qatar University, 14 Jan 2019.
5. Machining Emotion robotic art installation at the Fire Station Artists-in-Residence Gallery, Doha, Qatar, 11-14 June 2018.
6. Everyday Heroes public demonstration of social robots for autism therapy (organized by Qatar University and Step by Step Center for Special Needs), 8 April 2017.
7. Exclusive demonstration for His Highness Emir Tamim bin Hamad Al Thani of social robots and prosthetic arms during his visit at Qatar University, 19 Oct 2016.
8. Social Robotics demo for the President SR Nathan (President of Singapore), Social Robotics Laboratory, National University of Singapore, 24 Nov 2009.

## **PEER REVIEWER ASSIGNMENTS**

### **MEMBER OF THE AWARDS JURY**

1. 14<sup>th</sup> International Galileo Galilei Prize for Science, Galileo Galilei Prize Foundation of the Italian Rotary Club (through the invitation by Prof. Paolo Mancarella, Rector of University of Pisa, Italy), 2019.

## **ACADEMIC TENURE AND PROMOTION REVIEWS**

1. University of Texas Arlington (for Assistant Prof Julienne Greer), April 2021.
2. Oakland University (for Assistant Prof Wing-Yue Geoffrey Louie), Dec 2020.

## **RESEARCH PROPOSALS**

1. Nazarbayev University Research Review, 2021, Kazakhstan.
2. Nazarbayev University Research Review, 2020, Kazakhstan.
3. Medical Research Center of Hamad Medical Corp, 2020, Qatar.
4. Agency for Science, Technology and Research (A\*STAR), 3<sup>rd</sup> Singapore-Germany Academic Industry International Collaboration, 2020, Singapore.
5. National Science Center, 2020, Poland.
6. Fund for Scientific Research, 2018, Belgium.
7. Fund for Scientific Research, 2017, Belgium.
8. Fund for Scientific Research, 2016, Belgium.
9. Fund for Scientific Research, 2015, Belgium.

10. Fund for Scientific Research, 2014, Belgium.
11. Foundation for Science and Technology, 2013, Portugal.
12. Qatar National Research Fund, 2010, Qatar

## **JOURNALS**

1. Nature Scientific Reports
2. Bioinspiration and Biomimetics (IOP Publishing)
3. International Journal of Social Robotics (Springer)
4. IEEE Robotics and Automation Letters
5. IEEE Robotics and Automation Magazine
6. IEEE Transactions on Robotics
7. IEEE Transactions on Haptics
8. IEEE Transactions on Autonomous Mental Development
9. IEEE Transactions of Systems, Man and Cybernetics, Part A
10. IEEE Transactions on Industrial Informatics
11. IEEE Transactions on Information Technology in BioMedicine
12. IEEE Sensors Journal

## **CONFERENCES**

1. International Conference on Social Robotics (ICSR)
2. IEEE International Conference on Rehabilitation Robotics (ICORR)
3. IEEE International Conference on Robotics and Automation (ICRA)
4. IEEE International Conference on Intelligent Robotics and Systems (IROS)
5. IEEE International Conference on Humanoid Robotics
6. IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN)
7. ACM/IEEE International Conference on Human-Robot Interaction (HRI)
8. IEEE International Conference on Cybernetics & Intelligent Systems & Robotics, Automation and Mechatronics (CIS-RAM).
9. IEEE International Conference on Robotics and Biomimetics (ROBIO)
10. IEEE International Conference on Biomedical Robotics and Biomechatronics (BIOROB)

## **MEDIA COVERAGE**

[Last updated: April 2021]

1. QU fetes more than 50 distinguished scientists, 12 April 2021  
<https://www.qatar-tribune.com/news-details/id/210948/qu-fetes-more-than-50-distinguished-scientists>
2. Special feature on Robots for Autism, AlrayyanTV, 21 Feb 2020  
<https://youtu.be/m3Vokf7ARrQ> (slide to 46:19-49:39)
3. Mentor for Stars of Science (Season 11), October 2019.

4. New York Magazine: Companion Robots Are Helping Autistic Children Feel Comfortable in School, 2 November 2018.  
<http://nymag.com/developing/2018/11/qatar-university-keep-on-social-robots-autism.html>
5. Qatar Tribune: QU-CENG hosts Everyday Heroes, 6 May 2017.  
<http://www.qatar-tribune.com/news-details/id/62999>
6. Peninsula Qatar: QU-CENG organizes event on autism, 4 May 2017.  
<https://www.thepeninsulaqatar.com/article/04/05/2017/QU-CENG-organises-event-on-autism>
7. Gulf Times: QU team deploys social robots in autism therapy, 10 April 2017.  
<http://www.gulf-times.com/story/488041/QU-team-deploys-social-robots-in-autism-therapy>
8. Gulf Times: QU-CBE students learn the ropes of entrepreneurship, 25 February 2017  
<http://www.gulf-times.com/story/534306/QU-CBE-students-learn-the-ropes-of-entrepreneurshi>
9. Invent.PH: Building an inclusive future for PWDs using robotics and cybernetics, 27 July 2016. <http://invent.ph/next-gen-assistive-tech-pwds/>
10. Peninsula Qatar: Unique therapy of kids with autism likely (front page), 2 April 2016  
<http://thepeninsulaqatar.com/news/qatar/376800/unique-therapy-for-kids-with-autism-likely>
11. Gulf Times: QU team deploys social robots in autism therapy, 10 April 2016  
<http://www.gulf-times.com/story/488041/QU-team-deploys-social-robots-in-autism-therapy>
12. Qatar Tribune: QU turns to robot toys for special kids therapy,  
<http://archive.qatar-tribune.com/viewnews.aspx?n=15067FB7-0A98-4421-A04F-645598925071&d=20160316>
13. Qatar News Agency: Qatar University Researchers Test Robots in Autism Therapy  
<http://www.qna.org.qa/en-us/News/16041012280033/Qatar-University-Researchers-Test-Robots-in-Autism-Therapy>
14. Peninsula Qatar: Device to detect stomach cancer developed (front page), 14 March 2016  
<https://thepeninsulaqatar.com/news/qatar/374030/device-to-detect-stomach-cancer-developed>
15. Qatar University Research Magazine (cover story), November 2015, Cutting-edge tech for health and wellness.
16. Peninsula Qatar: QU-led team revolutionizes prosthetic hand design, 31 August 2015.  
<https://www.thepeninsulaqatar.com/news/qatar/351315/qu-led-team-revolutionises-prosthetic-hand-design>
17. Qatar is Booming: Prosthetic hand research conducted by QU-CENG faculty, 30 August 2015.  
<http://www.qatarisbooming.com/article/prosthetic-hand-research-conducted-qu-ceng-faculty>
18. Gulf Times: QU Engineering College Faculty conduct prosthetic hand research, 30 August 2015. <http://www.gulf-times.com/story/453163/QU-engineering-college-faculty-conduct-prosthetic-hand-research>



19. British Broadcasting Corporation: The Truth about the Turing Test, 24 July 2015.  
<http://www.bbc.com/future/story/20150724-the-problem-with-the-turing-test>
20. La Gaceta de Salamanca: Robots que ayudan a niños autistas a mejorar su integración social, 8 July 2015.  
<http://www.lagacetadesalamanca.es/tecnologia/2015/07/08/robots-ayudan-ninos-autistas-mejorar-integracion-social/148560.html>
21. Europa Press (Spain), July 2015, Robots que ayudan a niños autistas a mejorar su integración social. <http://www.europapress.es/portaltic/portalgreek/noticia-robots-ayudan-ninos-autistas-mejorar-integracion-social-20150708140412.html>
22. Gulf Times: Teams for Imagine Cup contest meets US envoy, 27 May 2017.  
<http://www.gulf-times.com/story/440936/Teams-for-Imagine-Cup-contest-meets-US-envoy>
23. Qatar is Booming, 27 May 2015, US Ambassador joins local tech stars as they gear up for Imagine Cup regional finals.  
<http://www.qatarisbooming.com/article/us-ambassador-joins-local-tech-stars-they-gear-imagine-cup-regional-finals>
24. Nature Materials: The Turing Touch Test, March 2015.  
<https://www.nature.com/articles/nmat4257>
25. Mentor for Stars of Science (Season 6), October 2014, Experimental evaluation on the Pool Warning System
26. El Confidencial (Spain), October 2014, Siri, por qué en colegio me llaman autista?
27. ConSalud.es (Spain): Crean robots que ayudan a los niños con autismo, 20 August 2014.  
[https://www.consalud.es/tecnologia/crean-robots-que-ayudan-a-los-ninos-con-autismo\\_12620\\_102.html](https://www.consalud.es/tecnologia/crean-robots-que-ayudan-a-los-ninos-con-autismo_12620_102.html)
28. TEDx Qatar University, April 2014, "Human touch or not?" TEDxQU 2014
29. Italia Salute, December 2013, I robot come terapia per l'autismo
30. Computerra (Russia), November 2013, Робот работает психотерапевтом
31. CON SALUD.es: Crean robots que ayudan a los niños con autismo (online healthcare newspaper based in Madrid, Spain), August 2014.  
[http://www.consalud.es/see\\_news.php?id=12620](http://www.consalud.es/see_news.php?id=12620)
32. GULF TIMES: QU teams win Imagine Cup national finals, 30 April 2014.  
<http://www.gulf-times.com/Mobile/Qatar/178/details/390307/QU-teams-win-Imagine-Cup-national-finals>
33. SOUTH CHINA MORNING POST: Robotics could be a big step in autism therapy, but stumbling blocks remain. February 2014.  
<http://www.scmp.com/lifestyle/family-education/article/1434179/robotics-could-be-big-step-autism-therapy-stumbling>
34. SIEMPRE! (a newspaper in Mexico), Los autómatas contra el autismo, December 2013.  
<http://www.siempre.com.mx/2013/12/los-automatas-contra-el-autismo/>
35. MIT TECHNOLOGY REVIEW: How Social Robotics is Revolutionising Therapy for Autistic Children. November 2013. <http://www.technologyreview.com/view/521746/how-social-robotics-is-revolutionising-therapy-for-autistic-children/>

36. E-CONNECT, Giving touch back to those who lost it, March 2013, <http://www.ece.nus.edu.sg/econnect/>
37. NUS-ECE Outreach: Empowering Intelligence. Empowering the Future. Empowering You. 2013, <http://www.youtube.com/watch?v=lioK3mp64M4>
38. BBC, The Why Factor: Handshake, <http://www.bbc.co.uk/programmes/p0104gvx>, 2 Nov 2012.
39. DISCOVERY CHANNEL: Robots has Human Touch with Fingerprints <http://news.discovery.com/tech/robots-has-human-touch-fingerprints-110922.html>
40. POPULAR SCIENCE: Enhancing Robots' Senses of Touch By Giving them Human-Like Fingerprints <http://www.popsci.com/technology/article/2011-09/enhancing-robots-senses-touch-giving-them-human-fingerprints>
41. MIT TECHNOLOGY REVIEW: Artificial Fingerprints Help Robots Distinguish Shapes <http://www.technologyreview.com/blog/arxiv/27176/>
42. PHYSORG.COM: Robotics team finds artificial fingerprints improve tactile abilities <http://www.physorg.com/news/2011-09-robotics-team-artificial-fingerprints-tactile.html>
43. NEW SCIENTIST: Air pockets can make prosthetic hands feel real, issue 2807, 8 April 2011, [www.newscientist.com/article/mg21028073.900-air-pockets-can-make-prosthetic-hands-feel-real.html](http://www.newscientist.com/article/mg21028073.900-air-pockets-can-make-prosthetic-hands-feel-real.html)
44. MIT TECHNOLOGY REVIEW: Making realistic skin for robots, 23 Sept 2009, <http://www.technologyreview.com/blog/arxiv/24152/>
45. NEW SCIENTIST: Artificial skin can't fool the human touch, issue 2729, 8 Oct 2009, <http://www.newscientist.com/article/mg20427295.000-artificial-skin-cant-fool-the-human-touch.html>
46. KOREA IT TIMES, Robots keep imitating human behavior, 17 Aug 2009, <http://www.koreaitimes.com/story/4676/robots-keep-imitating-human-behavior>
47. SINGAPORE THE STRAITS TIMES, Fake skin with 'human touch', 9 Oct 2009.
48. TECHNOVELGY: Robots need realistic skin!, 24 Sept 2009, <http://www.technovelgy.com/ct/Science-Fiction-News.asp?NewsNum=2550>
49. LIVE SCIENCE: The challenge of making 'Surrogate' skin, 25 Sept 2009, <http://www.livescience.com/technology/090925-surrogate-skin.html>
50. A to Z of Robotics: Building the Human Body: Artificial Skin and Medical Application, <http://www.azorobotics.com/article.aspx?ArticleId=78>

## TEACHING ACTIVITIES

### COURSES TAUGHT AT QATAR UNIVERSITY (2013-present)

#### Undergraduate Courses:

1. Introduction to Robotics (MECH 484), Fall 2017, Fall 2018

2. Engineering Mechanics - Dynamics (MECH 222), Spring 2018, Spring 2020
3. Engineering Graphics (GENG 111), Spring 2013-Spring 2021
4. Control Systems (MECH 361), Spring 2015, Spring 2016
5. Mechanical Mechanisms (MECH 321), Fall 2013, Fall 2014
6. Engineering Skills and Ethics (GENG 107), Fall 2014, Fall 2015-Spring 2016

**Graduate Courses:**

1. Robotics and Automation (MECH 583), Fall 2013, Fall 2016, Spring 2019, 2020, 2021.

**PROJECT SUPERVISION (all as main supervisor unless otherwise stated)**

**POST-DOCTORAL FELLOWS**

1. Ahmad Yasser, 2020-present.
2. Kishor Kumar Sadasivuni, 2015-2017.
3. Anna Prach, 2016-2017 (hired at NUS, under QNRF-NPRP7).
4. Xianming Ye, 2014-2016.
5. Tauseef Gulrez, 2014-2015.

**DOCTOR OF PHILOSOPHY**

1. Ahmad Yasser, Safe and Adaptive Social Robots for Children with Autism, Fall 2019.

**MASTER OF SCIENCE**

1. Ali Salem Alsaari, Spring 2022 (expected).
2. Abdelrahman Ahmed, Mechanical and energy absorption properties of 3D-printed honeycomb structures with Voronoi tessellations, Fall 2021 (expected).
3. Ahmad Qadieib Alban, AI for meltdown detection in autism using wearable sensors Fall 2021 (expected; co-supervised).
4. Mohammed Mudassir, Design and Fabrication of a Parametric 3D Printed Passive Prosthetic Hand Based on Anthropometric Features, Fall 2020.
5. Mohammad Talal Houkan, Design of Embedded 3D Printed Sensors on a Robot for Monitoring and Capturing Atmospheric Carbon Dioxide, Fall 2020.
6. Ahmed Mohammed El Noamany, Handshake Biomechanics: Hand and Fingers Movement Analysis, Fall 2015.

**RESEARCH ENGINEERS / RESEARCH ASSISTANTS**

1. Aya Gaballah, 2018-2021
2. Ahmad Yousef Qadeib Alban, 2020-2021
3. Malek Ayes, 2020-2021
4. Ahmed Abdelmonem Hegazi, 2020-2021
5. Mohamed Sobhi, 2020
6. Hussein Aly, 2020-2021
7. Mohammed Mudassir, 2019-2021
8. Muni Raj Maurya, 2020-2021
9. Usman Asghar, 2020-2021
10. Sajna MS, 2021
11. Sajeel Nagathan Kavil, 2021
12. Yamamah Alsalloum, 2020-2021
13. Amar Nakhleh, 2021
14. Zeyad Tarek Mansour, 2019-2021

15. Houssam Abdullah Abdulrazak, 2019-2021
16. Abdelrahman Mohamed Ragab Ahmed, 2019-2021
17. Khalid Ali, 2019
18. Mohammed Hoque, 2019-2020.
19. Stephen Trent, 2018.
20. Farah Al Khatib, 2018-2019.
21. Mohammad Khaleel Abubasha, 2015-2017.
22. Dimple Bhuta, 2016-2017 (hired at NUS, under QNRF-NPRP7)
23. Hifza Javed, 2016.
24. Mohammed Ayub, 2015.

## **PARTICIPATION IN THESIS COMMITTEES**

### **DOCTOR OF PHILOSOPHY**

1. Graduate Studies Office Representative, Regina Padmanabhan (area: Electrical Engineering), Multi-Objective Closed-Loop Control of Intravenous Drug Administration for Anesthesia and Cancer Chemotherapy, Doha, Qatar, 2018.
2. External Panel Member and Rapporteur, Arturo Cruz-Maya (area: Informatics), The Role of Personality, Memory, and Regulatory Focus on Human-Robot Interaction École Normale Supérieure Techniques Avancées (ENSTA) ParisTech, Palaiseu, France, 2018.
3. External Panel Member, Rocco Antonio Romeo (area: Bioengineering), Tactile Sensing System for Biomechatronic Prosthetic Hands and Grasp Analysis, Università Campus Bio-Medico, Rome, Italy, 2017.
4. External Panel Member, Phan Gia Hoang (area: Mechanical and Aerospace Engineering), Capturing Human Motor Strategies for Robotic Automation of Tooling Tasks: Instrumented Tools and Data Analysis, Nanyang Technological University, Singapore, 2016.
5. External and Oral Exam Panel Member, Wong Hong Yee Alvin (area: Mechanical and Aerospace Engineering), Enhancing Social Skills Group Intervention for Children with Autism Spectrum Disorder Through Socially Assistive Robotics, Nanyang Technological University, Singapore, 2015.

### **MASTER OF SCIENCE**

1. Chair of MS Thesis Examination Committee, Alap Zahid, Fabrication of A Nitric Oxide Releasing PVA/Chitosan-Snap Hydrogel for Wound Healing Application, 21 Nov 2018.
2. Chair of MS Thesis Examination Committee, Ismail Ahmad Shehadi, Heat Transfer Enhancement by Novel Aluminum Porous Heat Sinks, 21 Nov 2018.
3. Chair of MS Thesis Examination Committee, Mohammed Shublak, Experimental Analysis of Water Evaporation Losses in Cooling Towers using Advanced Filter Technology, 20 Nov 2018.
4. Chair of MS Examination Committee, Sharief Saleh, Development of Novel Instrumentation Incorporating Magnetoresistive Encoders for the Measurement of Angular Position and Speed, 14 May 2018.
5. Chair of MS Examination Committee, Hassan H. Miqdad, Illumination Estimation by Deep Learning, 8 May 2018.
6. Chair of MS Examination Committee, Ric Chester Nuqui, Quality Management in Qatar Construction Industry, April 2016.
7. Chair of MS Examination Committee, Khulood Khalil Al-Dous, 2014.

8. Member of MS Examination Committee, Amara Al Mannai, 2014.

### **COURSES TAUGHT AT THE NATIONAL UNIVERSITY OF SINGAPORE (2008-2013)**

#### **Undergraduate Courses:**

1. Electrical Engineering (CG1108), lecture, 2009-2012.
2. Electrical Engineering (CG1108), tutorial, 2009-2012.
3. Digital Fundamentals (EE2020), tutorial, 2011-2012.
4. Engineering Mathematics (TG1401), tutorial, 2008.

#### **Graduate Courses:**

1. Mechatronics Instrumentation and Sensors (MCH5206), lecture, 2008-2012.
2. Computational Neuroscience & Neuroengineering (GSN6506), 2013.

#### **PROJECT SUPERVISION (all as main supervisor unless otherwise stated)**

##### **POST-DOCTORAL FELLOWS**

1. Deepak Joshi, 2011-2012.

##### **DOCTOR OF PHILOSOPHY**

1. Lee Wang Wei, Design and use of a biomimetic tactile sensor array, 2012-2013 (co-supervisor).
2. Liao Yung Siang, Machine learning algorithms for robot control, 2012-2013 (co-supervisor).
3. Saba Salehi, Tactile Sensing and Control of Prosthetic/Robotic Hands, 2009-2012.
4. Hisham Abdul Hakkim, Robotic tactile sensing, 2009-2011.

##### **MASTER OF ENGINEERING**

1. Htun Lin Oo, 2009-2010
2. Rangarajan Jegadeesan, 2009-2010.

##### **MASTER OF SCIENCE**

1. Sushil Singh Chauhan, 2013
2. Rohit Srinath Bharadwaj, 2012.
3. Yeshwin Mysore Srinivasa, 2012.
4. Hifza Javed, 2012.
5. Soumo Pramanik, 2012.
6. Sushil Singh Chauhan, 2012.
7. Natarajan Swaminathan, 2012.
8. Prerit Mishra, 2012.
9. Hosmane Ramakrishna Venkatesh, 2012.
10. Vignesh Kumar, 2012.
11. Sangadi Nookarajesh Varma, 2011.
12. Nagasubramaniam Kumarapan, 2011.
13. Imtiaz Ahmed, 2011.

## **PARTICIPATION IN THESIS COMMITTEES**

### **DOCTOR OF PHILOSOPHY**

1. Internal and oral panel member, Zhang Shuang, Electrical and Computer Engineering, National University of Singapore, 2012.
2. Internal and oral panel member, Electrical and Computer Engineering, National University of Singapore, Yan Han, 2010.
3. Thesis committee member, He Hongsheng, Electrical and Computer Engineering, National University of Singapore, 2012.
4. Internal and oral panel member, Electrical and Computer Engineering, National University of Singapore, Yan Haibin.
5. Thesis committee member, Electrical and Computer Engineering, National University of Singapore, Li Yanan.
6. Thesis committee member, Electrical and Computer Engineering, National University of Singapore, Sangit Sasidhar.

### **MASTER OF ENGINEERING**

1. Internal examiner, Wang Bin, 2012.
2. Internal examiner, Yao Jin, 2012.
3. Internal examiner, Dai Dongjiao, 2011.
4. Internal examiner, Wu Rong, 2011.

## **SERVICE ACTIVITIES**

### **Committees (at Qatar University):**

#### **Qatar University:**

- Senator, Qatar University Faculty Senate (Research Committee), Feb. 2018-present.
- Committee Member, KINDI Center for Computing Research Hiring Committee for Cybersecurity and Artificial Intelligence for Prof/Associate Prof/Assistant Prof, October 27, 2020 - June 2021.
- Committee Member, Entrepreneurship and Innovation Strategy, December 30, 2016-March 30, 2017.

#### **College of Engineering:**

- Coordinator, General Engineering, Engineering Graphics (GENG111), Fall 2014-present.
- Committee Member, AI Robot Project, TIEE, July 2020-present.

#### **Department:**

- Program Coordinator, Graduate Studies, Mechanical Engineering Program, Jan. 2018-present.
- Coordinator, Senior Students Projects, Fall 2014-Fall 2017.
- Coordinator for Mechanical Engineering, Fundamental Assessment Exam, Fall 2014-Fall 2017.
- Chair, ABET Outcome F: an understanding of professional and ethical responsibility
- Chair, ABET Outcome G: communication skills
- Chair, ABET Outcome K: an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

## **Committees (Outside Qatar University):**

### **PROFESSIONAL ORGANIZATIONS**

- Subcommittee Member, Robotic Arms (Manipulators), American Society of Mechanical Engineers (ASME) Codes and Standards Committee, June 2020-June 2024.
- Steering Committee Member, Asian Control Association (ACA), 2018-present.
- Member, American Society of Mechanical Engineers (ASME), 2018-present.
- Member, Institute of Electrical and Electronics Engineers (IEEE), 2009-present (Senior Member since 2014).
- Member, American Association for the Advancement of Science (AAAS), 2016, 2018-present.
- Member, BioRobotics Technical Committee, IEEE Engineering in Medicine and Biology Society, 2015-present.
- Member, Robotic Hand Grasping and Manipulation Technical Committee, IEEE Robotics and Automation Society, 2015-present.
- Chair, Institute of Electrical and Electronics Engineers (IEEE) Systems, Man & Cybernetics Society, Singapore Chapter, 2011, 2012.
- Treasurer, IEEE Systems, Man & Cybernetics Society, Singapore, 2009, 2010, 2013.
- Management Committee Member, IEEE Robotics & Automation Society, Singapore, 2009, 2010.
- Member, IEEE Robotics & Automation Chapter, Singapore, 2009 - 2013.
- Member, IEEE Systems, Man and Cybernetics Society, Singapore, 2009 - 2013.
- Member, Biomedical Engineering Society, Singapore, 2009.

### **EDITORIAL LEADERSHIP (JOURNALS)**

- Associate Editor, IEEE Robotics and Automation Letters (RA-L), since Sept. 2018.
- Editorial Board Member, Springer Nature Applied Sciences Journal, since August 2018.
- Review Editor, Frontiers in Education, since April 2016.
- Associate Editor for Humanoids Robotics, International Journal of Advanced Robotic Systems, Sage, since June 2013.
- Editorial Board Member, Human Robot/Machine Interaction, International Journal of Advanced Robotic Systems, Sage, since June 2013.
- Associate Editor, Frontiers in Bionics and Biomimetics, since November 2015.
- Associate Editor, International Journal of Social Robotics, Springer, 2012-2018.
- Review Editor, Frontiers in Bionics and Biomimetics, April 2013-November 2015.
- Editorial Board Member, Computational Cognitive Science, Springer, since 2013-2016.
- Editorial Board Member, International Journal of Advanced Robotics Systems, InTech, since Jan 2012-June 2013.
- Assistant Editor, International Journal of Social Robotics, Springer, 2009-2011.

### **EDITORIAL LEADERSHIP (CONFERENCES)**

- Associate Editor, Proceedings of the 31<sup>st</sup> IEEE International Conference on Robot and Human Interactive Communication (Ro-Man 2021), 8-12 Aug 2021.

- Associate Editor, Proceedings of the 30<sup>th</sup> IEEE International Conference on Robot and Human Interactive Communication (Ro-Man 2020), 31 Aug-4 Sept 2020.
- Associate Editor, Proceedings of the IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechatronics (BioRob 2020), 29 Nov-1 Dec 2020.
- Associate Editor, Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2019), 4-8 November 2019.
- Editor, Proceedings of the 29<sup>th</sup> IEEE International Conference on Robot and Human Interactive Communication (Ro-Man 2019), 14-18 October 2019.
- Editor, Proceedings of the 28<sup>th</sup> IEEE International Symposium on Robot and Human Interactive Communication (Ro-Man 2018), August 2018.

### GUEST EDITORSHIPS OF JOURNAL SPECIAL ISSUES

- Carbon-Neutral Buildings Inspired by Biomimicry, *Frontiers in Sustainable Cities*, 2021, Guest Editors: JJ Cabibihan, F Fodli, M Irshidat, N Bioria, K Oosterhuis.
- Special Issue on Robot and Human Interactive Communication 2020 (Part II), *Advanced Robotics*, Guest Editors: T Inamura, AK Pandey, S Kumar, MA Williams, JJ Cabibihan, L Behera.
- Special Issue on Robot and Human Interactive Communication 2020 (Part I), *Advanced Robotics*, Guest Editors: T Inamura, AK Pandey, S Kumar, MA Williams, JJ Cabibihan, L Behera.
- Sociorobotics, *International Journal of Social Robotics*, Springer, April 2018 issue, Guest Editors: A Agah, JJ Cabibihan, AM Howard, M Salichs and H He.
- When Robots Engage Humans, *International Journal of Social Robotics*, Springer, Aug. 2014 issue, Guest Editor: JJ Cabibihan, R Simmons and MA Williams.
- Towards an Effective Design of Social Robots, *International Journal of Social Robotics*, Springer, Nov. 2011 issue, Guest Editors: H Li, JJ Cabibihan, and YK Tan.

### CONFERENCE/WORKSHOP ORGANIZATION LEADERSHIP

- Standing Committee Member, 13<sup>th</sup> International Conference on Social Robotics (ICSR 2021), Singapore.
- Program Chair, 28<sup>th</sup> IEEE Robots Man Systems Interactions Symposium (Ro-Man 2019), New Delhi, India.
- Program Co-Chair, 11<sup>th</sup> International Conference on Social Robotics (ICSR 2019), Madrid, Spain.
- Regional Chair, 9<sup>th</sup> IEEE International Conference on Cybernetics and Intelligent Systems & Robotics, Automation and Mechatronics (CIS-RAM 2019), Bangkok, Thailand.
- General Chair, 10<sup>th</sup> International Conference on Social Robotics (ICSR 2018), Qingdao, China.
- Publication Chair, 27<sup>th</sup> IEEE Robots Man Systems Interactions Symposium (Ro-Man 2018), Nanjing, China.
- Workshop Co-Organizer, Children-Robots Interaction Workshop, 27<sup>th</sup> IEEE Robots Man Systems Interactions Symposium (Ro-Man 2018), Nanjing, China.
- Program Co-Chair, 9<sup>th</sup> International Conference on Social Robotics (ICSR 2017), Tsukuba, Japan.
- Chair, ASEAN and Emerging Economies Forum, 34<sup>th</sup> IEEE International Conference on Robotics and Automation (ICRA 2017), Singapore.
- Program Chair, 8<sup>th</sup> International Conference on Social Robotics (ICSR 2016), Kansas City, Kansas, USA.



- Workshop Co-Organizer, Social Robots: A Tool to Advance Interventions for Autism, 8<sup>th</sup> International Conference on Social Robotics (ICSR 2016), Kansas City, Kansas, USA.
- General Chair, 6<sup>th</sup> IEEE International Conference on Cybernetics and Intelligent Systems & Robotics, Automation and Mechatronics (CIS-RAM 2013), Manila, Philippines.
- Program Chair, 4<sup>th</sup> International Conference on Social Robotics (ICSR 2012), Chengdu, China.
- Publication Co-Chair, 3<sup>rd</sup> International Conference on Social Robotics (ICSR 2011), Amsterdam, Netherlands.
- Finance Chair, 5<sup>th</sup> IEEE International Conference on Cybernetics and Intelligent Systems; & Robotics, Automation and Mechatronics (CIS-RAM 2011), Qingdao, China.
- Program Co-Chair, 2<sup>nd</sup> International Conference on Social Robotics (ICSR 2010), Singapore.
- Finance Chair, 4<sup>th</sup> IEEE International Conference on Cybernetics and Intelligent Systems & Robotics, Automation and Mechatronics (CIS-RAM 2010), Singapore.

### **CONFERENCE INTERNATIONAL PROGRAM COMMITTEE MEMBERSHIPS**

- 29<sup>th</sup> IEEE Robots Man Systems Interactions Symposium (Ro-Man 2020), Naples, Italy.
- International Conference on Computational Thinking Education 2020, Hong Kong.
- Asian Control Conference (ASCC 2019), Fukuoka, Japan.
- IEEE International Conference on Robotics and Biomimetics (ROBIO 2017), Macau, China.
- International Conference on Computational Thinking Education (CTE 2017), Hong Kong.
- IEEE International Conference on Robotics and Biomimetics (ROBIO 2016), Qingdao, China.
- International Conference on Social Robotics (ICSR 2015), Paris, France.
- International Conference on Social Robotics (ICSR 2014), Sydney, Australia.
- IEEE International Conference on Control and Automation (ICCA 2014), Taichung, Taiwan.
- IEEE International Conference on Control and Automation (ICCA 2013), Hangzhou, China.
- IEEE International Conference on Robotics and Biomimetics (ROBIO 2012), Guangzhou, China.
- IEEE International Conference on Cybernetics & Intelligent Systems & Robotics, Automation and Mechatronics (CIS-RAM 2011), Qingdao, China.
- International Conference on Autonomous and Intelligent Systems (AIS 2011), Canada.
- IEEE International Conference on Robotics and Biomimetics (ROBIO 2011), Phuket, Thailand.
- IEEE International Conference on Cybernetics & Intelligent Systems & Robotics, Automation and Mechatronics (CIS-RAM 2010), Singapore.
- International Conference on Intelligent Robotics and Applications (ICIRA 2010), Shanghai, China.
- IEEE International Conference on Robotics and Biomimetics (ROBIO 2010), Tianjin, China.
- International Conference on Social Robotics (ICSR 2009), Incheon, Korea.

### **CONFERENCE SESSION CHAIR / CO-CHAIR ASSIGNMENTS**

- 28<sup>th</sup> IEEE Robots Man Systems Interactions Symposium (Ro-Man 2019), New Delhi, India.
- International Conference on Social Robotics (ICSR 2018), Chengdu, China.
- IEEE International Conference on Mechatronics and Automation (ICMA 2017), Takamatsu, Japan.
- International Conference on Social Robotics (ICSR 2016), Kansas City, USA.
- Middle East Conference on Biomedical Engineering (MECBME 2014), Doha, Qatar.
- IEEE Region 10 Conference (TENCON 2012), Philippines.
- International Conference on Social Robotics (ICSR 2010), Singapore.

- International Conference on Intelligent Robotics and Applications (ICIRA 2010), Shanghai, China.
- International Conference on Social Robotics (ICSR 2009), Incheon, Korea.
- International Conference on Humanoids, Nanotechnology, Information Tech, Communication and Control, Environment, and Management (HNICEM 2008), Manila.