## The Contributors

Alexander C. Abad is a graduate of BS Electronics and Communications Engineering at St. Louis University-Baguio City. He finished his MS in Electronics and Communications Engineering at De La Salle University - Manila and currently taking up his PhD in ECE at DLSU. His field of interest includes robotics, machine intelligence, machine vision, mixed-signal electronics and IC design.

**Timothy M. Amado** is a faculty member of the Electronics Engineering Department of the College of Engineering at the Technological University of the Philippines-Manila. He earned his BSECE degree at TUP-Manila where he graduated Magna Cum Laude, and his MSECE degree at Mapua University (formerly Mapua Institute of Technology). He is currently taking his PhD in ECE at Mapua University. He is also a recipient of the DOST Academic Excellence Award, Special Award in Engineering and TUP Academic Excellence Award. His research interest are Data Analytics, Machine Learning, and Deep Learning.

Argel A. Bandala is an Associate Professor and Research Faculty of the Electronics Engineering Department at De La Salle University. He received his Master of Science in Electronics and Communications Engineering in year 2012 and Doctor of Philosophy in Electronics and Communications Engineering in year 2015 at De La Salle University. He is the current Vice Chair of The Institute of Electrical and Electronics Engineers (IEEE) Philippines Section and Secretary of Computational Intelligence Society Philippine Chapter. He is also a member of IEEE Robotics and Automation Society. His main works are "Implementation of Varied Particle Container for Smoothed Particle Hydrodynamics-Based Aggregation for Unmanned Aerial Vehicle Quadrotor Swarm" and "Swarming Algorithm for Unmanned Aerial Vehicle (UAV) Quadrotors - Swarm Behavior for Aggregation, Foraging, Formation, and Tracking."

**Robert Kerwin C. Billones** is currently taking his PhD-ECE in De La Salle University in the area of artificial intelligence and vision systems. He received his Master of Science (Electronics and Communications Engineering) from De La Salle University. He currently works as part-time faculty in the Electronics Engineering Department of De La Salle University, and as science research specialist in Department of Science and Technology for the CATCH-ALL project under the intelligent transport systems program.

Melvin K. Cabatuan received his B.Sc. degree in Electronics and Communications Engineering (ECE) from Cebu Institute of Technology, Cebu, Philippines, in 2004; MS degree in Engineering from Nara Institute of Science and Technology (NAIST), Nara, Japan, in 2010; and Ph.D. degree in ECE from De La Salle University (DLSU) - Manila in 2016. He joined the Electronics and Communications Engineering Department of DLSU in 2011, where he is currently an Assistant Professor. His current research interest involves Machine/Deep Learning, Computer Graphics, and Computer Vision applications to Health Informatics, Education Technology, Game/Graphic Content Development, and Mobile Computing. He is knowledgeable in programming languages - C/Cpp, Java, and MatLab/Octave scripting. He has more than 5 years of experience in computer vision application development with OpenCV library in the mobile framework.

Jose Santos R. Carandang VI currently works at the Department of Biology, De La Salle University. He does research in Ecology, Evolutionary Biology and Zoology. Their current project is "An assessment and evaluation of the cyto-genotoxic effects of E waste in Manila, Philippines using different bio-monitoring models."

Julien L. Carandang is a candidate for Doctor of Philosophy in Development Studies in De La Salle University. He also took his Master of Arts in Development Policy in De La Salle University. His Bachelor of Arts in Consular and Diplomatic Affairs was obtained in De La Salle University-College of Saint Benilde.

**Elmer P. Dadios** is a University Fellow and Professor at De La Salle University. He is also the President of Neuronemech, Inc. In 1996, he received his Doctor of Philosophy from Loughborough University. In 1997, he was an Exchange

Scientist in Japan Society for the Promotion of Science, Tokyo Institute of Technology. He served as the Director of Engineering Graduate School, De La Salle University in 1998–1999 and Director of School of Engineering, De La Salle University in 2003–2004. He is also the General Chair for HNICEM in 2003, 2005, 2007, 2009, 2011, 2013. His main works are "Fuzzy Logic - Controls, Concepts, Theories and Applications," ISBN: 978-95351-0396-7, 2012. "Fuzzy Logic - Algorithms, Techniques and Implementations," ISBN: 978-953-510393-6, 2012. "Fuzzy Logic - Emerging Technologies and Applications," ISBN: 978-953-51-03370, 2012. His research interests includes; Robotics, Mechatronics, Automation, Intelligent Systems, Neural Networks, Fuzzy Logic, Genetic Algorithms, Evolutionary Computation, and IT. He is a Senior Member in The Institute of Electrical and Electronics Engineers (IEEE) and Founder and current Chair of IEEE Computational Intelligence Society, Philippines. He is a member of IEEE Region 10 Executive Committee and Founder and President of The Mechatronics and Robotics Society of the Philippines

Ma. Ellenita G. De Castro is currently holding a rank of Assistant Professorial Lecturer 2 at the Biology Department of De La Salle University-Manila. At present, she is completing a dissertation research entitled "Ecophysiology and Silvicultural Requirements of a Nickel Hyperaccumulating Plant, Brackenridgea palustris ssp. foxworthyi as a Potential Bioremediation Agent" to obtain her doctoral degree in Biology. Among her field of interests include phytoremediation, mycoremediation, impacts of environment of embryonic development and environmental rehabilitation. She was part of the recently completed research project entitled Screening of Indigenous Plant as Biodiesel Feedstock under the CHED-PHERNet Sustainability Studies Program and at present she is actively involved in a research projects entitled "The feasibility of using bamboo as a low-cost, environment-friendly alternative to polyvinyl chloride (PVC) pipes in hydrophonic vegetable production," an interdisciplinary research funded by the DLSU University Research Coordination Office (URCO). Since 2014, Ms. De Castro already co-authored a total of nine (9) papers in various ISI and Scopus-listed journals and had presented several papers in local conferences. With regards to her administrative capacity, Ms. De Castro serves as the Senior Project Technical Staff at the Program Management Unit of CHED-PHERNet Sustainability Studies Program specifically tasks to liase DLSU to CHED Main Office, a task she performs since 2009.

**Angelo R. dela Cruz** received his B.Sc. and M.Sc. in Electronics and Communications Engineering degrees from Mapua Institute of Technology Manila in 2000, and from De La Salle University Manila in 2007 respectively. He received his Ph.D. in Electrical and Electronics Engineering

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Jay Robert B. del Rosario was born at Imus in Cavite, Philippines, on October 11, 1982. In 2003, he continued his study in Manila and earned a degree in Bachelor of Science in Computer Engineering and Master of Information Technology at Technological University of the Philippines. He obtained his Certificate in Mechatronics in Milan, Italy late 2010 after passing the Mechatronics Specialist Exam. Mr. del Rosario was a former Professor and chairman of Mechatronics and Robotics Society in the Kingdom of Bahrain and Kingdom of Saudi Arabia from 2008–2011. He has been in the teaching profession for 12 years and currently pursuing his PhD in Electronics and Communications Engineering at De La Salle University-Manila, and PhD in Education major in Educational Management at Cavite State University-Indang, Cavite. His research interests include Mechatronics, Computer Systems Architecture, Webpage Design and Development, Software Engineering, Industrial Automation and Computational Intelligence. Most of his research articles can be viewed in Scopus, Google Scholar and Researchgate and a Professional Member of IEEE and Red Cross-Philippines.

Dennis S. Erasga is Associate Professor of Environmental Sociology at the De La Salle University (DLSU), Manila, Philippines. He is a Salzburg Global Seminar Fellow (Biography as Mirror of Society, 2006). He has publications on social theory, ecoconstructionism, literature as critique of science, and a theory of social action in Philippine sociology-"pakiramdaman" including two books: From Grain to Nature: A Rice-Based History of Environmental Discourse in the Philippines, 1946–2005 (2012) and Sociological Landscape: Theories, Realities and Trends (2013). Professor Erasga obtained his PhD in Environmental Science from the University of the Philippines, Los Banos. He is currently teaching graduate and undergraduate theory and sociology courses at the Behavioral Sciences Department, De La Salle University. He holds several professorial chairs the latest of which was the Pao Shih Tien Chair in Organizational Development.

**Jean Clifford B. Espiritu** received the B.Sc. in Electronics Engineering from De La Salle University - Manila in 2017. He has since designed and fabricated commercialized Printed Circuit Boards for smart motor controller. He, together with his colleagues, has developed and published a research paper about a Fuzzy Logic Buck and Boost Converter using Arduino. His research interests include power electronics, schematic and PCB Design, and PCB Fabrication.

Laurence A. Gan Lim is a Full Professor of the Mechanical Engineering Department at De La Salle University. He obtained his Doctor of Philosophy in Computer Science at Coventry University. He is the Chair of the Institute of Electrical and Electronics Engineers (IEEE, Philippines). He is also a member of the Philippine Society of Mechanical Engineers (PSME). His main work is "Implementatio of GA-KSOM and ANFIS in the classification of colonic histopathological images."

**Balintawak S. Gareza** is a practicing anesthesiologist and presently the chair of the Division of Family and Community Medicine. She is the pioneer of research culture in the College of Medicine since its opening in 2002. Her effort in the field of academic research has earned the medical students' citations and awards in various research competitions in the National level.

Jomel A. Lorenzo Jr. received the B.Sc. in Electronics Engineering from De La Salle University - Manila in 2017. He has since developed BLDC motor control algorithms and designed embedded systems software in Arduino and Dave. He has received the best paper award and other rewards in DLSU Technology Fair 2017. His research interests include embedded systems, motor control, and battery systems management.

**Noriel C. Mallari** graduated with BS Electronics and Communications Engineering and MS Electronics and Communications Engineering from De La Salle University (DLSU), Manila, Philippines in 2006 and 2012, respectively. He is currently a PhD student in Electronics and Communications Engineering in DLSU. He is also an Assistant Professor of the Electronics and Communications Engineering Department, Gokongwei College of Engineering of DLSU. His research interests are controls and power management for electric vehicles and renewable energy applications.

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**Michael B. Ples** is a medical practitioner in the field of Otolaryngology-Head and Neck Surgery. He is a medical and surgical fellow of the Philippine Academy of Medical Specialist Inc. and the International College of Surgeons-Philippine Section. His research interest are in the fields of medical science, animal physiology, and natural products.

Eric Camilo R. Punzalan obtained his bachelor's degree in chemistry in 1964 from De La Salle University (DLSU) as a COCOFED full scholar. He served as a junior faculty member of the same department shortly thereafter before leaving for the United States in 1988. After finishing graduate studies at the University of Connecticut under Prof William F. Bailey and a post-doctoral research stint at the University of Chicago with Prof Philip Eaton, he returned to the Philippines under the Balik Scientist Program of the Department of Science and Technology (DOST). He specializes in organic/organometallic chemistry and environmental science. He returned to DLSU Chemistry Department and served as Research Director for the College of Science from 1999 to 2005. During this period, he instituted the DLSU Research Congress and revived the college journal now known as the Manila Journal of Science (MJS).

**Kristofferson M. Reyes** received the B.Sc. in Computer Engineering from De La Salle University - Manila in 2017. He has since developed several Android applications, the notable ones being an Information Bank, "InfoBank," which serves as a logged and tracker of computers that go in and out of any IT department, and an e-bike app, "AdaptivEbike," which works in conjunction with a specific model of the e-bike in order to display, gather, and control the response of the e-bike. His research interests include artificial intelligence, cloud computing, and mobile software applications.

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## Guidelines for Contributors

- 1. The Journal on Computational Innovations and Engineering Applications (JCIEA) aims to promote the development of new and creative ideas on the use of technology in solving problems in the field of computational applications, computational intelligence, electronics and information and communications technology (ICT), manufacturing engineering, energy and environment, robotics, control and automation, and all their related fields. Manuscript submissions should, therefore, be in pursuit of the same goal and within the related fields.
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- 4. Manuscripts should include a unique title, an abstract, some keywords, an introduction and discussion of the study, a presentation and discussion of results, and a conclusion. Authors may also include an acknowledgement of funding organizations or consultants, if needed.
- 5. Manuscripts may be sent to *jciea.dlsu@gmail.com* or *jciea@dlsu.edu.ph* as either an MS Word file (\*.doc or \*.docx) or a LaTeX file (\*.tex), including its supporting files.
- 6. Manuscripts in either file format should have the following features:
- Single-spaced, two-column format with 1-inch margin on all sides on letter-sized template
- Font to be used is Times New Roman, size 11
- Graphs (\*.eps, \*.svg), tables (\*.csv), and images (\*.jpg, \*.png) should be saved and sent apart from the MS Word file.
- Citations and references should be submitted in IEEE or APA format.
- Submission of these references in a BibTeX format is preferred.
- 7. Manuscript should be eight to twelve (8–12) pages long, including all figures, tables, and references. Manuscripts exceeding the 12-page limit will require permissions from the editors.
- 8. Authors must include their full names and affiliations in the manuscript. They may include a 150- to 200word biography to be included in the back portion of the journal.

# Call for Papers

### SCOPES AND TOPICS

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Agents and Multi-agent Systems Computational Intelligence Genetic and Evolutionary Algorithms Data Mining Expert Systems Fuzzy Logic Machine Learning Machine/Computer Vision Natural Language Processing Neural Networks

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