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Cover Story

UCSC Honours Outstanding Graduates at the General Convocation 2024



Medal recipients recognised for their exceptional achievements at the convocation

The University of Colombo School of Computing (UCSC) proudly celebrated the achievements of its graduates at the General Convocation 2024, recognizing outstanding academic performance, innovation, and professional excellence across its undergraduate degree programmes. The awards honoured students who demonstrated exceptional commitment throughout their academic journey and reflected UCSC's continued commitment to nurturing future leaders in computing and information technology.

This year, UCSC graduated 320 students across its undergraduate programmes. The graduating students included 164 from the third-year Computer Science General Degree Programme, 38 from the Computer Science Honours Degree Programme, 21 from the Software Engineering Honours Degree Programme, 67 from the third-year Information Systems General Degree Programme, and 30 from the Information Systems Honours Degree Programme.

In the Information Systems General Degree Programme, Ms. K.H.C.L. De Silva received the Zebra Technologies Award for the Best Performance in Information Systems, while Ms. P.G.M.N. Pupulewatte was presented with the David Pieris Group Award for the Best Industrial Training in Information Systems – 2023. Mr. W.W.R.U. Wegiriya and Mr. I.N. Weerasekera received the David Pieris Group Awards for the Best Industrial Training in Computer Science for 2023 and 2024, respectively.

Among the Information Systems Honours graduates, Mr. M.M.A.S.T. Akmeemana received both the IFS Award for Academic Excellence in Information Systems and the University of Colombo Award for Academic Excellence in Information Systems. The Sampath Bank Award for the Best Final Year Project in Information Systems was jointly awarded to Mr. A.M.A.D. Bandara and Ms. D.S. Gamage.

In the Computer Science Honours Degree Programme, Mr. H.K.P.S. Fernando received both the Professor Mohan Munasinghe Award for Academic Excellence in Computer Science and the University of Colombo Award for Academic Excellence in Computer Science, while Mr. O.V. Rupesinghe received the ICTA Award for the Best Final Year Project in Computer Science.

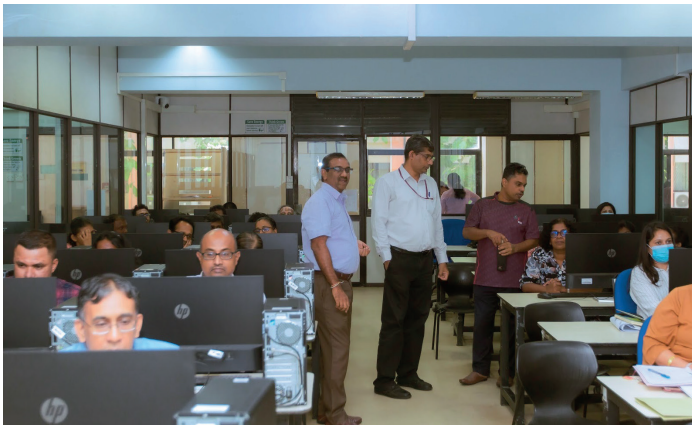
For the Software Engineering Honours Degree Programme, Mr. O.V. De Silva received both the IFS Award for Academic Excellence in Software Engineering and the University of Colombo Award for Academic Excellence in Software Engineering. The Soma Goonetillake Memorial Award for the Best Final Year Project in Software Engineering was jointly awarded to Ms. L.I.L. Harischandra, Ms. K.K.S. Nayanathara, and Mr. T.V.R. Weerakoon. In addition, Mr. I. Shinthujen received the Wimala Jayaratne Memorial Award for Software Engineering.

The General Convocation 2024 celebrated the remarkable accomplishments of UCSC graduates while recognizing those who have excelled academically, demonstrated creativity through innovative projects, and made meaningful contributions during their industrial training. Their achievements stand as a testament to the high standards of education at UCSC and its ongoing mission to produce competent, ethical, and industry-ready computing professionals capable of making a lasting impact on society.



A view of the convocation hall during the ceremony

UCSC Introduces ERPNext Training to Drive Digital Transformation and Operational Excellence



The University of Colombo School of Computing (UCSC) recently organized an ERPNext Training Programme for university staff, conducted by Prof. Kasun De Zoysa. The session introduced participants to Enterprise Resource Planning (ERP) systems and demonstrated how ERPNext can enhance institutional efficiency by integrating administrative processes into a single digital platform.

The training provided an overview of ERP systems and their role in improving organizational performance. Participants learned how ERP solutions streamline workflows, automate routine tasks, provide real-time access to information, strengthen collaboration among departments, and support informed decision-making. The session also highlighted the importance of ERP systems in ensuring scalability and maintaining compliance with organizational standards.

Prof. De Zoysa introduced participants to several leading ERP platforms before focusing on ERPNext, emphasizing its flexibility, affordability, and user-friendly interface. The session explored the platform's wide range of integrated modules, including Accounting, Human Resources, Payroll, Asset Management, Customer Relationship Management (CRM), Project Management, and Education, demonstrating how they can simplify and modernize university operations.

The programme also presented UCSC's phased implementation plan, which initially focuses on Accounting, Human Resources, Asset Management, Payroll, and Education modules. In addition, participants discussed one of the key challenges in digital transformation—resistance to change—and explored strategies for encouraging the successful adoption of new technologies within the workplace.

The training concluded by illustrating how ERPNext can replace fragmented workflows based on spreadsheets and standalone applications with an integrated system that improves data accuracy, reduces duplication, and enhances overall productivity. By equipping staff with practical knowledge of ERPNext, UCSC continues to strengthen its commitment to digital transformation and innovation while fostering a more efficient and technology-driven working environment.









UCSC staff attending the traning session

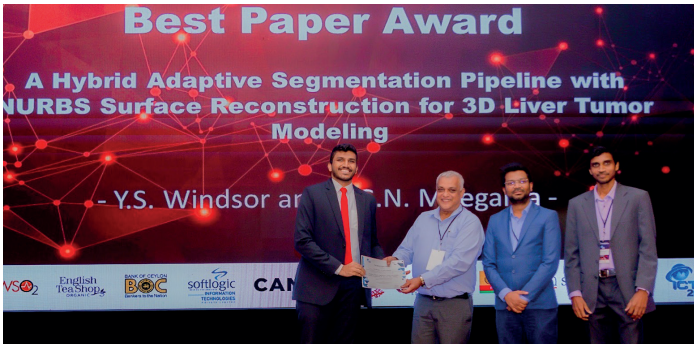
UCSC Successfully Hosts the 25th International Conference on Advances in ICT for Emerging Regions

The University of Colombo School of Computing (UCSC) proudly celebrated a significant milestone with the successful hosting of the 25th International Conference on Advances in ICT for Emerging Regions (ICTer 2025), held on 19–20 November 2025 at the Marino Beach Hotel, Colombo. Marking a quarter-century of academic excellence, ICTer 2025 reaffirmed its reputation as Sri Lanka's premier international conference dedicated to information and communication technology research and innovation.

ICTer traces its origins to the International Information Technology Conference (IITC), first launched in 1998. Over the past twenty-five years, the conference has grown into a globally recognised platform that brings together researchers, academics, industry professionals, and practitioners to exchange knowledge, present innovative research, and foster collaborations that address the unique technological challenges faced by emerging regions.

The conference featured keynote addresses by internationally renowned experts, including Professor Thiemo Voigt of Uppsala University, Daniel Johansson of Cambio Healthcare, and Professor Kasun De Zoysa of the University of Colombo School of Computing. Their presentations explored emerging trends, technological advancements, and future opportunities in the ICT sector, inspiring meaningful discussions among participants from diverse academic and professional backgrounds.

ICTer 2025 received an impressive 146 research paper submissions from local and international researchers. Each submission underwent a rigorous double-blind peer-review process, with every manuscript evaluated by at least three reviewers to ensure the highest standards of academic quality. Following this comprehensive review process, 21 full papers and 10 poster presentations were accepted, resulting in a highly competitive acceptance rate of approximately 21 percent. The selected papers reflected excellence in originality, technical contribution, methodology, and relevance to the conference themes.



The winner of the Best Paper Award at the ICTer 2025 Conference



Keynote speakers delivering their addresses at the ICTer 2025 Conference

The accepted research covered a wide range of contemporary topics, including AI-assisted diagnostics and medical imaging, language, speech and text processing, environmental sustainability, population and behavioural analytics, sentiment and acoustic processing, and systems, security, and privacy. These research contributions demonstrated the growing impact of ICT in addressing real-world challenges while promoting sustainable technological development.

A landmark achievement of ICTer 2025 was the publication of its conference proceedings in the Springer Communications in Computer and Information Science (CCIS) series. This accomplishment significantly enhanced the international visibility and scholarly impact of the research presented at the conference, providing authors with greater global recognition and reinforcing ICTer's standing within the international research community.

For the first time, ICTer also introduced a dedicated Industry Track, creating stronger links between academia and industry. From eight extended abstract submissions, three were selected for presentation, offering participants valuable insights into practical innovations, industry experiences, and emerging technological solutions. This initiative further strengthened ICTer's commitment to bridging academic research with real-world applications.

As ICT continues to transform societies and economies worldwide, ICTer remains committed to promoting innovative, high-quality research that contributes to the development of emerging regions. The successful completion of ICTer 2025 not only celebrated twenty-five years of excellence but also reflected UCSC's continued dedication to advancing research, fostering international collaboration, and shaping the future of information and communication technology for the benefit of society.

Research highlights

University of Colombo School of Computing

Publication List - 2025

Conference Publications

June

01. Priyatharshan Balachandran, Uthayasanker Thayasivam, Dr. B H R Pushpananda, Dr. A Ruvan Weerasinghe, "Towards Effective Emotion Analysis in Low-Resource Tamil Texts", Conference: Proceedings of the Fifth Workshop on Speech, Vision, and Language Technologies for Dravidian Languages, Publication date: 2025/5, Doi: https://aclanthology.org/2025.dravidianlangtech-1.101/ (Foreign)

02. Eranga Bandara, Safdar H Bouk, Sachin Shetty, Ross Gore, Sastry Kompella, Ravi Mukkamala, Abdul Rahman, Peter Foytik, Xueping Liang, Ng Wee Keong, Prof. T N K De Zoysa, "VindSec-Llama—Fine-Tuned Meta's Llama-3 LLM, Federated Learning, Blockchain and PBOM-enabled Data Security Architecture for Wind Energy Data Platforms", 2025 International Wireless Communications and Mobile Computing (IWCMC), Publication date: 2025/5/12, Doi: https://doi.org/10.1109/IWCMC65282.2025.11059510 (Foreign)

03. Eranga Bandara, Safdar H Bouk, Sachin Shetty, Ross Gore, Sastry Kompella, Ravi Mukkamala, Abdul Rahman, Peter Foytik, Xueping Liang, Ng Wee Keong, Prof. T N K De Zoysa, "Bassa-Llama—Fine-Tuned Meta's Llama LLM, Blockchain and NFT Enabled Real-Time Network Attack Detection Platform for Wind Energy Power Plants" 2025 International Wireless Communications and Mobile Computing (IWCMC), Publication date: 2025/5/12, Doi: https://ieeexplore.ieee.org/abstract/document/11059647/ (Foreign)

July to September

04. A. De Silva, K. P. Hewagamage, and R. A. B. Abeygunawardana, "Industry expert's expectations on the higher-order cognitive skills of IT graduates in Sri Lanka," in Proceedings of the Lincoln International Multidisciplinary Conference (LIMC), 22 Aug. 2025.

October to December

05. A De Silva, K P Hewagamage, RAB Abeygunawardana,"A comparison of higher-order cognitive skills among Sri Lankan IT undergraduates", The 10th International Conference of Sabaragamuwa University of Sri Lanka, Publication date: 2025/12/3, Publisher: Sabaragamuwa University of Sri Lanka, Doi: http://repo.lib.sab.ac.lk:8080/xmlui/handle/susl/5174 (Local)

06. Eranga Bandara, Safdar H Bouk, Sachin Shetty, Ravi Mukkamala, Abdul Rahman, Peter Foytik, Ross Gore, Xueping Liang, Ng Wee Keong, Prof. T N K De Zoysa, "SRE-Llama-Fine-Tuned Meta's Llama LLM, Federated Learning, Blockchain and NFT Enabled Site Reliability Engineering (SRE) Platform for Communication and Networking Software Services", 2025 7th International Conference on Blockchain Computing and Applications (BCCA), Publication date: 2025/10/14, Publisher: IEEE, Doi: https://doi.org/10.1109/BCCA66705.2025.11229660 (Foreign)

07. Nimna Suharshani, Awansika Nimuthumana, Geethika Prabhath, Anuradha Mahasinghe, Prof. T N K De Zoysa, Nalin Ranasinghe, Dr. A P Sayakkara, A Hybrid Quantum–inspired Prototype for Solving Nonlinear Continuous Optimization Problems", 2025 9th SLAAI International Conference on Artificial Intelligence (SLAAI-ICAI), Publisher: IEEE, Publication date: 2025/11/19, Doi: https://doi.org/10.1109/SLAAI-ICAI68534.2025.11318454 (Local)

08. Asini Silva, Dr. T A Weerasinghe, "Auto-Generating a Job Dataset with Top Demanding IT Skills from Real-Time Job Postings", International Conference on Information and Communication Technology for Intelligent Systems, Publication date: 2025/5/23, Publisher: Springer Nature Singapore, Doi: https://link.springer.com/chapter/10.1007/978-981-95-1361-1_25 (Foreign)

09. Sasangi Nayanathara, Inuri Harischandra, Thamira Weerakoon, Dr. B H R Pushpananda, "Enhancing Sinhala Text-to-Speech with End-to-End VITS Architecture", International Conference on Speech and Computer, Publisher: Springer Nature Switzerland, Publication date: 2025/10/13 Doi: https://link.springer.com/chapter/10.1007/978-3-032-07956-5_6 (Foreign)

10. Khadijah Azward, Kushantha Sajith Lakshan, Pabasara Sathsaranee, Chaminda Ranasinghe, Dr. K D Sandaruwan, Dr. Dilrukshi Gamage, "Enhancing User Experience for Data Visualization in Three-Dimensional Immersive Space", Proceedings of the 16th International Conference of Human-Computer Interaction (HCI) Design & Research, Publication date: 2025/11/7, Doi: https://doi.org/10.1145/3768633.3770131 (Foreign)

11. Rashmi Gunawardana, Michelle Perera, Rashini Lakshika, Chaminda Ranasinghe, Dr. K A K T Karunanayaka, "Enhancing Adaptive Personalized Learning Interfaces with Generative AI for Individuals with ADHD",Proceedings of the 16th International Conference of Human-Computer Interaction (HCI) Design & Research, Publication date: 2025/11/7, Doi: https://dl.acm.org/doi/abs/10.1145/3768633.3770138 (Foreign)

12. P. Pallewatta, S. Mathara Arachchi, A. D. Cheok, S. Rizvan, K. Karunanayaka, T. Kayuni, T. Aleksandr, "Human Voice Synthesis and Cloning Using Generative AI Models: A Comprehensive Review of Recent Advances and Applications", 7th IEEE International Conference on Electrical, Control and Instrumentation engineering (IEEE ICECIE'2025), Date of Conference: 22nd-23rd November 2025, (International – Thailand), Doi: pending

13. P. Pallewatta, S. Mathara Arachchi, K. Karunanayaka, T. Kayuni, T. Aleksandr, A.Bhattarai, T. Halloluwa, K. A Nicodemas, W. Kyei, "BotonyBuddy: AI-Enabled Precision Plant Nursery Management for Multicrop Disease Classification and Phenology-Aware Age Estimation", 2025 IEEE International Conference on Agrosystem Engineering, Technology & Applications (AGRETA2025), Date of Conference: 27th -29th November, 2025 (International – Malaysia), Doi:- Pending

14. P. Pallewatta, S. Mathara Arachchi, K. Karunanayaka, T. Kayuni, T. Aleksandr, T. Halloluwa, "Advances in Bird Bioacoustics Using Deep Learning: A Comprehensive Review of Vocal Mechanisms, Acoustic Communication, and Conservation Application", 9th SLAAI International Conference on Artificial Intelligence (SLAAI-ICAI) 2025, Date of Conference: 20th November, 2025, Doi:- 10.1109/SLAAI-ICAI68534.2025.11318525 ,(Local- Sri Lanka)

15. P. Pallewatta, S. Mathara Arachchi, S. Rizvan, K. Karunanayaka, T. Kayuni, T. Aleksandr, K. Benbrahim, A. Maloba, "Spiking Neural Networks and fMRI–Constrained Spiking Neural Networks for Speech Recognition and Biological Signal Processing: A Comprehensive Review", 4th International Biomedical Instrumentation and Technology Conference (IBITeC) 2025, Date of Conference: 13th – 14th November, 2025 (International – Indonesia), Doi:- Pending

16. F. Zahra, K. Karunanayaka, S. Mathara Arachchi, P. Pallewatta, A. Maithripala, A. D. Cheok, 7th Virtual International Conference, Path to a Knowledge Society-Managing Risks and Innovation - (PaKSoM 2025), 7th Virtual International Conference, Path to a Knowledge Society-Managing Risks and Innovation, Date of Conference: 21st October 2025, Doi:- https://doi.org/10.5281/zenodo.18213334, (International – Serbia)

17. Hiruni Navodya Kudagama, Sameera Viswakula, Samantha Mathara Arachchi, S A Chamila J. Siriwardhana , " Advanced Modeling of Inflation Dynamics in Sri Lanka: A Comparative Analysis of Statistical, Machine Learning, Deep Learning, and Hybrid Forecasting Approaches", 25th International Conference on Advances in ICT for Emerging Regions (ICTer 2025). Date of Conference : 19-20 November, 2025, https://icter.lk/ , Doi: (Local),

18. C.L.I.S. Fonseka, K.P. Hewagamagea, Upul Rathnayakea, Thilina Halloluwa, R.M.U. S Bandara, "Nitrogen Management in Sri Lankan Rice Cultivation Using UAV-Based Multispectral Imagery and Machine Learning", International Conference on Future Networks and Distributed System ICFNDS '25). Date of Conference : December 8 - 9, 2025, https://www.icfnds.org/ (International : United Arab Emirates) DOI: pending

19. A. De Silva, K. P. Hewagamage, and R. A. B. Abeygunawardana, "Framework supporting policy decisions in IT higher education by enhancing higher-order cognitive skills of IT graduates in Sri Lanka," in Proceedings of the 7th International Research Symposium on Social Sciences & Humanities (IRSSSH), National Centre for Advanced Studies in Humanities and Social Sciences (NCAS), 30 Oct. 2025.

20. A. De Silva, K. P. Hewagamage, and R. A. B. Abeygunawardana, "Higher-order cognitive skills among entry-level IT professionals in Sri Lanka: Industry experts' point of view," in Proceedings of the Annual Research Conference 2025, Faculty of Graduate Studies, University of Colombo, 21 Nov. 2025.

21. A. De Silva, K. P. Hewagamage, and R. A. B. Abeygunawardana, "Assessing higher-order cognitive skills among IT undergraduates in Sri Lanka," in Proceedings of the International Conference on Innovation and Emerging Technologies 2025, Faculty of Technology, University of Sri Jayewardenepura, 27 Nov. 2025.

22. A. De Silva, K. P. Hewagamage, and R. A. B. Abeygunawardana, "Industry expectation of higher-order cognitive skills from entry-level IT professionals in Sri Lanka," in Proceedings of the 4th International Research Symposium on Management, Rajarata University of Sri Lanka, 27 Nov. 2025.

23. A. De Silva, K. P. Hewagamage, and R. A. B. Abeygunawardana, "A comparison of higher-order cognitive skills among Sri Lankan IT undergraduates," in Proceedings of the 10th International Conference of Sabaragamuwa University of Sri Lanka.

Journal Publications

June

01. M V P T Lakshika, Dr. H A Caldera, "Utilizing Association Rules in Knowledge Graphs for Enhanced News Summarization", International Journal on Advances in ICT for Emerging Regions (ICTer), Publication date: 2025/6/13, Doi: https://icter.sljol.info/articles/10.4038/icter.v18i2.7297 (Local)

02. D S Yahathugoda, Dr. M W A C R Wijesinghe, Dr. A R Weerasinghe, "Debiasing Hate Speech Classification Models for Queer Language Through Keyword Analysis", The International Journal on Advances in ICT for Emerging Regions, Publication date: 2025/6/1, Doi: https://journal.icter.org/index.php/ICTer/article/view/725 (Local)

03. T T Kaluarachchi, DMS Dissanayake, Dr. M I E Wickramasinghe, "Unsupervised Discovery of Salient Design Features of Websites", The International Journal on Advances in ICT for Emerging Regions, Publication date: 2025/6/14, Doi: https://journal.icter.org/index.php/ICTer/article/view/733 (Local)

04. Gayan Akmeemana, Dharshana Kasthurirathna, Dr. Asanka P Sayakkara, "Detecting Cryptographic Hash Functions through Electromagnetic Side-Channel Analysis", The International Journal on Advances in ICT for Emerging Regions, Publication date: 2025/6/23, Doi: https://journal.icter.org/index.php/ICTer/article/view/737 (Local)

05. P M D S Amarasooriya, Dr. K D Sandaruwan, "AI-Based 3D Simulation for Drone Flight Dynamics", The International Journal on Advances in ICT for Emerging Regions, Publication date: 2025/6/1, Doi: https://journal.icter.org/index.php/ICTer/article/view/717 (Local)

July to September

06. Ms. M V P T Lakshika, Dr. H A Caldera, Prof. T N K De Zoysa, "ECS-KG: An event-centric semantic knowledge graph for event-related news articles", Journal: Data & Knowledge Engineering, Publication date: 2025/9/1, Doi: https://doi.org/10.1016/j.datak.2025.102451 (Foreign)

07. Ruwanga Konara, Prof. T N K De Zoysa, Anuradha Mahasinghe, Dr. Asanka P Sayakkara, Dr. D N Ranasinghe, "Time Entangled Quantum Blockchain with Phase Encoding for Classical Data", Journal: arXiv preprint arXiv:2507.14839, Publication date: 2025/7/20, Doi: https://arxiv.org/abs/2507.14839 (Foreign)

08. Eranga Bandara, Ross Gore, Sachin Shetty, Ravi Mukkamala, Christopher Rhea, Atmaram Yarlagadda, Shaifali Kaushik, LHMP De Silva, Andriy Maznychenko, Inna Sokolowska, Amin Hass, Prof. T N K De Zoysa, "Standardization of Neuromuscular Reflex Analysis--Role of Fine-Tuned Vision-Language Model Consortium and OpenAI gpt-oss Reasoning LLM Enabled Decision Support System", Journal of: arXiv preprint arXiv:2508.12473, Publication date: 2025/8/17, Doi: https://doi.org/10.48550/arXiv.2508.12473 (Foreign)

09. Lojenaa Navanesan, Mark Scanlon, Dr. T N K De Zoysa, Dr. A P Sayakkara, "Gaining Forensic Insights through Electromagnetic Emanations: A Methodology and Detailed Analysis", Journal, Publication date: 2025/8/29, Doi: https://www.researchsquare.com/article/rs-7477307/latest (Foreign)

10. Ruwanga Konara, Dr. T N K De Zoysa, Dr. A P Sayakkara, "Decentralized Identity Management on Ripple: A Conceptual Framework for High-Speed, Low-Cost Identity Transactions in Attestation-Based Attribute-Based Identity", Journal: arXiv preprint arXiv:2509.10545, Publication date: 2025/9/7, Doi: https://doi.org/10.48550/arXiv.2509.10545 (Foreign)

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12. Ravindu Ramesh Perera, Anuradha Basnayake, Dr. M I E Wickramasinghe, "Auto-Scaling LLM-Based Multi-Agent Systems through Dynamic Integration of Agents", Journal: Frontiers in Artificial Intelligence, Publication date: 2025/9/12, Doi: https://www.frontiersin.org/journals/artificial-intelligence/articles/10.3389/frai.2025.1638227/abstract (Foreign)

13. Ashmari Pramodya, Nirasha Nelki, Heshan Shalinda, Chamila Liyanage, Yusuke Sakai, Dr. B H R Pushpananda, Dr. A R Weerasinghe, Hidetaka Kamigaito, Taro Watanabe, "SinhalaMMLU: A Comprehensive Benchmark for Evaluating Multitask Language Understanding in Sinhala", Journal: arXiv preprint arXiv:2509.03162, Publication date: 2025/9/3, Doi: https://doi.org/10.48550/arXiv.2509.03162 (Foreign)

14. Dr. R N Rajapakse, Claudia Szabo, "Towards Multi-Class Socio-Technical Congruence: Assessing Coordination in Collaborative Software Development Settings", Journal of Software: Evolution and Process, Publication date: 2025/9, Doi: https://doi.org/10.1002/smr.70040 (Foreign)

15. UHMS Samaranayaka, Mr. R M U A Rathnayake, ASW Karunarathna,"APPLICABILITY OF LEAN MAINTENANCE PRACTICES TO MITIGATE MAINTENANCE MANAGEMENT ISSUES IN SRI LANKAN HIGH-RISE RESIDENTIAL BUILDINGS", Journal: Proceedings The 13th World Construction Symposium| August, Publication date: 2025/08 Doi: https://www.researchgate.net/profile/Sanduni-Karunarathna/publication/394764652_APPLICABILITY_OF_LEAN_MAINTENANCE_PRACTICES_TO_MITIGATE_MAINTENANCE_MANAGEMENT_ISSUES_IN_SRI_LANKAN_HIGH-RISE_RESIDENTIAL_BUILDINGS/links/68a5ff416327cf7b63d845b2/APPLICABILITY-OF-LEAN-MAINTENANCE-PRACTICES-TO-MITIGATE-MAINTENANCE-MANAGEMENT-ISSUES-IN-SRI-LANKAN-HIGH-RISE-RESIDENTIAL-BUILDINGS.pdf (Local)

16. Nethmi Pathirana, Azma Imtiaz, Shakir Saheel, Dr. K A K T Karunanayaka, Adrian David Cheok, "CRGAN: A Context-Aware Clothing Design and Recommendation System for Young Sri Lankan Females Using Generative Adversarial Networks", Journal: IEEE Access, Publication date: 2025/7/29, Doi: https://doi.org/10.1109/ACCESS.2025.3593498 (Foreign)

17. Ishara Devendra, Chaman Wijesiriwardana, Prasad Wimalaratne, "State-of-the-Art in Software Security Visualization: A Systematic Review", Journal: arXiv preprint arXiv:2509.20385, Publication date: 2025/9/22, Doi: https://doi.org/10.48550/arXiv.2509.20385 (Foreign)

18. C.L.I.S. Fonseka, K.P. Hewagamagea, Upul Rathnayakea, Thilina Halloluwa, R.M.U. S Bandara, "Predicting SPAD Values in Sri Lankan Paddy Rice Fields using UAV-based Vegetation Indices", Journal: Transaction on Informatics and Data Science, Publication date: 2025/10 DOI : https://doi.org/10.24090/tids.v2i2.14980 (Foreign)

October to December

01. Ishani Fonseka, Prof. K P Hewagamage, Upul Rathnayake, RMU Bandara, Thilina Halloluwa, "Predicting SPAD Values in Sri Lankan Paddy Rice Fields using UAV-based Vegetation Indices", Journal: Transactions on Informatics and Data Science, Publication date: 2025/10/1, Publisher: UIN Prof. KH Saifuddin Zuhri, Doi: https://doi.org/10.24090/tids.v2i2.14980 (Foreign)

02. Indika Karunaratne, Ranasignhe Arachchilage Ashinka Shani, Vithanage Chethani Sandamali Vithanage, Pavithra Senanayake, Dr. D A S Atukorale, "Enhancing Student Engagement and Performance Through Personalized Study Plans in Online Learning: A Proof-of-Concept Pilot Study", Journal: Computers, Publication date: 2025/12/9, Publisher: MDPI, Doi: https://doi.org/10.3390/computers14120538 (Foreign)

03. Eranga Bandara, Sachin Shetty, Ravi Mukkamala, Ross Gore, Peter Foytik, Safdar H Bouk, Abdul Rahman, Xueping Liang, Ng Wee Keong, Prof. T N K De Zoysa, Aruna Withanage, Nilaan Loganathan, "Model context contracts-mcp-enabled framework to integrate llms with blockchain smart contracts", Journal: arXiv preprint arXiv:2510.19856, Publication date: 2025/10/21, Doi: https://doi.org/10.48550/arXiv.2510.19856 (Foreign)

04. Eranga Bandara, Ross Gore, Xueping Liang, Sachini Rajapakse, Isurunima Kularathne, Pramoda Karunarathna, Peter Foytik, Sachin Shetty, Ravi Mukkamala, Abdul Rahman, Amin Hass, Ng Wee Keong, Prof. T N K De Zoysa, Aruna Withanage, Nilaan Loganathan, "Agentsway--Software Development Methodology for AI Agents-based Teams", Journal: arXiv preprint arXiv:2510.23664, Publication date: 2025/10/26, Doi https://doi.org/10.48550/arXiv.2510.23664 (Foreign)

05. Eranga Bandara, Amin Hass, Ross Gore, Sachin Shetty, Ravi Mukkamala, Safdar H Bouk, Xueping Liang, Ng Wee Keong, Prof. T N K De Zoysa, Aruna Withanage, Nilaan Loganathan, "ASTRIDE: A Security Threat Modeling Platform for Agentic-AI Applications", Journal: arXiv preprint arXiv:2512.04785, Publication date: 2025/12/4, Doi: https://doi.org/10.48550/arXiv.2512.04785 (Foreign)

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08. Selvarajah Mohanarajah, Patric Valente, Aurelio Medina, Dr. Thambithurai Sritharan, "Privacy-Preserving Machine Learning Algorithms: A Survey", Asian Journal of Probability and Statistics, Publication date: 2025/12/29, Doi: https://hal.science/hal-05437043/ (Foreign)

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Abstracts/ Posters

01. R D Jayasinghe, C A Gamachchige, and H E M H B Ekanayake, “An autonomous human-following robot for office automation,” in Proc. 10th Int. Conf. Sabaragamuwa Univ. Sri Lanka & 6th China-Sri Lanka Commun. Coop. Forum (ICSUSL 2025), Belihuloya, Sri Lanka, Dec. 1–3 2025. (extended abstract, local)

02. C L I S Fonseka, K P Hewagamagea, Upul Rathnayaka, Thilina Halloluwa, R M U S Bandara, “Utilizing UAV-based Vegetation Indices to Predict SPAD Values in Paddy Rice Fields, International Conference on Agriculture and Plantation Management (InCAPM) 2025, Wayamba University , Makadura , May 16-18 2025 (Local)

03. C L I S Fonseka, K P Hewagamagea, Upul Rathnayakea, Thilina Halloluwa, R M U S Bandara, “Nitrogen Management in Sri Lankan Rice Cultivation Using UAV-Based Multispectral Imagery and Machine Learning”, 4th SLIIT International Conference on Engineering and Technology, SLII, Malabe, Sep 9 -11 2025 (Local)

Master of Cybersecurity Inauguration 2025

The inauguration ceremony of the Master of Cybersecurity Programme for the 2025 intake was successfully held on 22nd August 2025 at the Board Room of the University of Colombo School of Computing.

The event marked the official commencement of the programme with the participation of 34 newly enrolled students. The ceremony was graced by the presence of the Director/UCSC, Deputy Director/UCSC, Heads of Departments, Programme Coordinators of the master’s degree Programmes, academic staff members, administrative and financial officers, as well as non-academic staff members of UCSC.

Addressing the gathering, the Director/UCSC warmly welcomed the new cohort and highlighted the growing importance of cybersecurity education and research in the rapidly evolving digital landscape. The Deputy Director/UCSC and the Programme Coordinator of the Master of Cybersecurity Programme also shared valuable insights regarding the academic structure, professional opportunities, and prospects of the programme.

In addition, the Senior Assistant Registrar of the Postgraduate, Research and Projects Division addressed the students and guided them on administrative and examination-related matters.



Highlights from the inauguration ceremony

UCSC Empowers University Staff with AI Prompt Training to Enhance Workplace Productivity

Artificial Intelligence (AI) is rapidly transforming the way people work, communicate, and solve problems across industries. Recognizing its growing importance in higher education, the University of Colombo School of Computing (UCSC) recently conducted an engaging workshop titled “Save Time, Reduce Workload: AI Prompt Training for University Staff,” led by Prof. Kasun De Zoysa. The session introduced university staff to practical AI tools and effective prompting techniques designed to improve efficiency in academic and administrative work.

The workshop highlighted that AI should not be viewed as a replacement for human expertise but as a powerful assistant that enhances productivity. Through a series of demonstrations, participants learned how AI can simplify routine tasks, allowing staff to devote more time to strategic decision-making, student engagement, and other high-value responsibilities. The session emphasized that while AI accelerates many processes, human judgment and expertise remain essential in producing accurate and meaningful outcomes.

Participants were introduced to several leading AI platforms, including ChatGPT, Gemini, NotebookLM, and DeepSeek, each offering unique capabilities for writing, research, information analysis, and problem-solving. The workshop also explained the distinction between traditional search engines and Large Language Models (LLMs), illustrating how LLMs generate context-aware responses rather than simply retrieving information. This understanding enabled participants to identify the most suitable AI tool for different workplace scenarios.

A major focus of the programme was the art of prompt engineering. The session explained that the quality of AI-generated responses depends largely on the clarity and specificity of the instructions provided. Participants explored the characteristics of effective prompts, learning how clearly defined roles, goals, tasks, and contextual details can significantly





Prof Kasun De Zoysa addressing the staff during the training session

improve AI outputs. Various prompting techniques, including zero-shot, few-shot, role prompting, and iterative prompting, were introduced with practical examples relevant to university operations.

To demonstrate the practical value of AI, the workshop presented several real-world case studies drawn from university settings. These included drafting professional emails, preparing notices and reports, shortlisting applicants during recruitment, generating meeting minutes from recordings, and locating relevant university circulars. The examples illustrated how carefully designed prompts can substantially reduce the time required to complete routine administrative tasks while maintaining consistency and professionalism. In several scenarios, AI-assisted workflows reduced drafting time by 50–80%, enabling staff to focus on reviewing and refining the final output rather than creating documents from scratch.

The workshop also featured interactive activities that encouraged participants to develop their own prompts for common university tasks, such as preparing examination reminders, drafting procurement communications, writing policy notices, and producing financial reports. These hands-on exercises allowed attendees to immediately apply the concepts learned during the session and gain confidence in using AI responsibly within their daily work.

By combining practical demonstrations with interactive learning, the AI Prompt Training workshop successfully equipped university staff with essential skills for integrating AI into their professional responsibilities. As AI technologies continue to evolve, initiatives such as this reaffirm UCSC’s commitment to fostering digital innovation, enhancing workplace efficiency, and preparing university communities to leverage emerging technologies in responsible and meaningful ways.

Student's Events

Freshers' Championships 2025

From 25 January to 16 February 2025, the Inter-Faculty Freshers' Championships 2025 took place on the university premises. Twelve faculties and institutes under the University of Colombo banner participated in the event, competing enthusiastically across a wide range of sporting disciplines.

The competition quickly transformed into a theater of raw emotion and sensory overload, defined by the rhythmic thud of running spikes, deafening faculty chants, and the palpable pressure of high stakes. Every sprint and calculated strike was met with the fierce loyalty of teammates as freshers discovered the true pulse of sportsmanship. Pushed to their limits, they learned the poetry of resilience, the art of falling hard, rising faster, and carrying their team's hopes.

The climax unfolded at the closing ceremony on February 25th at the New Arts Theatre (NAT). After weeks of relentless battles, the Faculty of Science was crowned the Overall Champions with 203 points, concurrently seizing the Overall Women's Championship. Showcasing their own formidable spirit, the 22nd batch UCSC captured the Overall Men's Championship with 113 points and secured the Overall 1st Runner-up title with 188 points. The Faculty of Medicine rounded out the podium, fighting valiantly to claim the Overall 2nd Runner-up position with 158 points.

While fierce rivalries drew battle lines for three weeks, shared exhaustion and triumph ultimately wove everyone together. Underneath separate faculty colors, the freshers stood united under one enduring legacy: the University of Colombo.











Highlights from the Closing ceremony

The Trophy of Computing 2025

On January 3rd, 2026, the grounds came alive for the highly anticipated Trophy of Computing 2025. Organized by the Students' Union of UCSC, this all-day softball cricket tournament brought together 14 mixed-gender teams for a relentless display of six-over clashes.

The tournament kicked off with a fiery group stage, where every single delivery counted, before raising the stakes with a tense knockout round. The air was thick with competitive energy, defined by the sharp crack of the bat, the flying dust of diving fielders, and the roaring cheers of supporters camped on the boundary lines.

Through the intense heat and fierce matchups, Team "Topma Bajiyo" emerged as the undisputed Champions, dominating the pitch to finish the entire tournament unbeaten. They were closely followed by Team "Malika", who fought valiantly to secure the 1st Runner-up title, while Team "Binura Ayya" rounded out the podium as the 2nd Runner-up.

As the sun set and the final runs were tallied, the fierce on-field rivalries melted into celebration. The intense athletic battleground transitioned into a vibrant afterparty, with evening DJ music setting the rhythm for a night of camaraderie, dancing, and unforgettable memories.



Highlights from The Trophy of Computing 2025

Appointment of UCSC Students' Union '22

On June 27th, 2025, the corridors of the UCSC buzzed with palpable anticipation. The highly awaited elections for the UCSC Students' Union '22 had arrived, drawing over 30 driven candidates ready to step up and shape the future of the student body.

Orchestrated flawlessly by the outgoing Union '21, and under the vigilant oversight of the Election Committee: Dr. M.I.E. Wickramasinghe (Senior Treasurer) and Mr. Sampath (Senior Assistant Registrar), the day was a testament to the institution's democratic spirit. The battleground was drawn across two fierce sub-elections, seeking to fill the vital roles of the Board of Officials, Committee Members, and Batch Representatives.

As the final ballots were tallied and the tension broke, a new vanguard emerged to take the helm. The Appointed Board of Officials:

- President: Sashika Ekanayake
- Vice President: Kaveen Amarasekara
- Secretary: Imantha Bandara
- Junior Treasurer: Esandu Epa
- Editor: Kalmith Dissanayake

Committee Members:

- Ranjan Abishek
- Nimesha Madhusan
- Aminda Sithummal
- Ahamadh Saadiq

Batch Representatives:

- Tharanga Weerakkody
- Mihisha Weerasinghe
- M. Zaidh
- A. Siddeek

The climactic end to the election season unfolded in the UCSC Board Room. In a quiet but weighty tradition, the official seals, documents, and signs were formally handed over. The transition of power is complete, and the Union '22 era has officially begun.

Battle of the Coders

UCSC secured a memorable victory over the Faculty of Computing, University of Sri Jayewardenepura (USJP), in the first-ever hardball cricket match between the two institutions. The 50-over encounter was held on 18 June 2025 at the University of Colombo Grounds.

After winning the toss, USJP elected to bat first. UCSC successfully chased the target to claim victory. Sudhaksha Fernando from UCSC was named Player of the Match, while Aditha Imasha who was also from UCSC received the Best Bowler award. The UCSC Team was led by UCSC Captain Kaweesha and Vice-Captain Liviriu Weerasinghe while the Japura FoC Team was led by Captain Kavindu Nimesh and the Vice-Captain Dulith Perera.

The event marked a significant milestone in inter-university sports and strengthened the friendship between the two computing faculties. Towards the evening, Battle of the Coders ended securing the trophy to UCSC Team with the promise of its continuation for the upcoming generations as a tradition of brotherhood and sportsmanship.





Highlights from Battle of the Coders 2025

Padura 2025

As the sun dipped below the horizon on August 7th, 2025, the university grounds underwent a magical transformation. Spearheaded by the collaborative vision of the 19th and 21st batches, the highly anticipated UCSC Padura unfolded into an unforgettable evening of cultural celebration.

Stepping into the venue felt like walking into a classic cinematic frame. The space was meticulously decorated to capture the rustic, warm, and inviting essence of a traditional Kopi Kade. Under the soft, moody glow of ambient lighting, the air buzzed with nostalgia and a deep sense of shared heritage.

The night came alive through a vibrant tapestry of live performances. The rhythmic beat of traditional drums paved the way for captivating dance routines, while evocative stage dramas and soulful live music held the crowd spellbound. It was more than just an event; it was a beautifully crafted escape into tradition, weaving together art, rhythm, and the enduring spirit of the university community.



Moments of Padura 2025



Short term Training Programs in UCSC

Computer Services Centre (CSC)

- **Training Course on Data Science with Python**
  Duration - 08 Saturdays
  Course Fee - Rs. 35,000/=
  Minimum Qualifications - Some experience in Data Analytics and experience in Programming.

- **Software Quality Assurance Using Test Automation Frameworks**
  Duration - 08 Saturdays
  Course Fee - Rs. 35,000/=
  Minimum Qualifications - Better if the participants have fundamental knowledge in JAVA programming

- **Training Course on Python Fundamentals**
  Duration - 08 Sundays
  Course Fee - Rs. 35,000/=
  Minimum Qualifications - Participants with little or no programming experience

- **Training Course on AutoCAD**
  Duration - 08 Sundays
  Course Fee - Rs. 30,000/=
  Minimum Qualifications - People with basic programming knowledge

- **Java Application Development Using JavaSE**
  Duration - 08 Sundays
  Course Fee - Rs. 35,000/=
  Minimum Qualifications - People with basic programming knowledge

Advanced Digital Media Technology Centre (ADMTC)

- **Advanced Multimedia Web Design & Development Techniques**
  Duration - 08 Sundays
  Course Fee - Rs. 35,000/=
  Minimum Qualifications - Basic Computer Knowledge

- **Graphic Design & Creativity Development**
  Duration - 08 Saturdays
  Course Fee - Rs. 35,000/=
  Minimum Qualifications - Basic Computer Knowledge

University of Colombo School of Computing

For more information
https://ucsc.cmb.ac.lk/training-programmes

Postgraduate Degree Programs in UCSC

- **Master of Computer Science (MCS)**
  Duration - 2 years
- **Master of Science in Computer Science (MSc in CS)**
  Duration - 2 years
- **Master of Information Technology (MIT)**
  Duration - 2 years
- **Master of Information Security (MIS)**
  Duration - 2 years
- **Master of Business Analytics (MBAnalytics)**
  Duration - 2 years
- **Master of Cybersecurity (MC)**
  Duration - 2 years
- **Master of Computing Technology (MCT)**
  Duration - 1 years

External Degree Program in UCSC

- **Bachelor of Inforation Technology (BIT)**

  UCSC took the initiative to launch the three-year External Degree programme leading towards the award of Degree of Bachelor of Information Technology (External) in the year 2000. This degree programme has been redesigned according to ACM guidelines and Policy Framework for External and Extension programme introduced by the University Grants Commission in the year 2010. BIT Programme is designed to:

  - Produce qualified IT professionals through external mode in addition to the traditional University output.
  - Set professional standards and encourage students to obtain skills in commercial IT applications and in the usage of necessary tools.
  - Enable those who could not enter into a state university to read for a degree in IT due to severe competition in obtaining such a degree from a state university.
  - Provide an opportunity to those non-graduates already working in the IT sector to obtain a formal qualification through self-study.

  The minimum duration of the BIT degree programme will be 3 academic years.



University of Colombo
School of Computing

For more information
https://ucsc.cmb.ac.lk/pg/



News to be sent to:
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