8th International Conference on Information Technology Research

ICITR 2023

"The Next Evolution in Digital Transformation"

ABSTRACTS OF THE PROCEEDINGS OF ICITR 2023

DECEMBER 7-8

FACULTY OF INFORMATION TECHNOLOGY

UNIVERSITY OF MORATUWA, SRI LANKA









Abstracts of the Proceedings of ICITR 2023

of

8th INTERNATIONAL CONFERENCE ON INFORMATION TECHNOLOGY RESEARCH ICITR 2023

7th - 8th December 2023

"THE NEXT EVOLUTION IN DIGITAL TRANSFORMATION"

Information Technology Research Unit Faculty of Information Technology University of Moratuwa Sri Lanka

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Faculty of Information Technology,

University of Moratuwa

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International Conference on Information Technology Research

The 8th International Conference on Information Technology Research (ICITR 2023) is set to take place on December 7th and 8th, 2023. This annual event, organized by the Information Technology Research Unit (ITRU), the esteemed research dissemination arm of the Faculty of Information Technology at the University of Moratuwa, Sri Lanka, promises a dynamic exploration of cutting-edge technological developments.

Under the overarching theme of "The Next Evolution in Digital Transformation," ICITR 2023 aims to provide a robust forum for in-depth discussions on the rapid advancements occurring in research and development within the realm of digital transformation. Esteemed as a cornerstone in the field of information and communications technology (ICT), ICITR invited paper submissions across five compelling tracks: computer vision, artificial intelligence, data science, data-driven applications, and technology trends.

In a demonstration of collaborative support, ICITR 2023 is honored to receive technical co-sponsorship from the IEEE and the IEEE Sri Lanka Section Chapter, as well as financial sponsorship from Cambio Software Engineering. This year, the conference witnessed an impressive submission of around 223 research papers, with a discerning acceptance of 47, maintaining an acceptance ratio of approximately 21%. All accepted and presented papers will be submitted to the IEEE Xplore digital library, indexed by SCOPUS.

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Abstracts of the blind-reviewed full papers are included in this conference proceeding.

Message from the General Co-Chair

B. H. Sudantha General Chair International Conference on Information Technology Research (ICITR 2023)



Welcome to the University of Moratuwa and the 8th International Conference on Information Technology Research (ICITR 2023). The objective of the conference is to provide a forum for researchers worldwide to unveil their latest work in information technology research. The theme of the conference, "The Next Evolution in Digital Transformation," gives direction, and it covers a broad spectrum of allied fields as well.

Maintaining the high quality of a conference requires various levels of involvement. including a well-balanced review process. This year, 223 full papers were submitted to the conference. Each paper was subject to review by at least two reviewers, and finally, 47 papers were selected as full-paper publications for the conference. I would like to express my sincere thanks to the reviewers for their dedicated, efficient, responsible, and rigorous review process, ensuring the high quality of the conference papers. And, I should be much more thankful to the authors who shared their research experiences at the conference for their hard work. It helps us prepare proceedings at an excellent level.

Three workshops were organized to benefit the conference participants in various new trends and stimulate their research experiences. A very special thank you should go to our three distinguished keynote speakers: Prof. Sardar M. N. Islam from ISILC, Victoria University, Melbourne, Australia; Prof. Chung-Yih Wang, Director of the Department of Radiation Oncology, Cheng Hsin General Hospital, Taipei, Taiwan; and Prof. Chan-Yun Yang, Professor at the Department of Electrical Engineering, National Taipei University, Taiwan.

I would like to thank everyone who has given his or her time, energy, and ideas to assist in organizing this event, including all the members of the organizing committee, the TPC Co-Chairs, TPC members, and all the reviewers, for the quality and depth of the reviews and their sense of responsibility and responsiveness under very tight deadlines. In particular, I would like to highlight and acknowledge the tremendous efforts of especially the Director, Information Technology Research Unit, the Editorial Board, the ICITR Committees, including various energetic chairs and organizing committees of workshops and the conference, and finally, our dedicated faculty staff members who gave their support and worked tirelessly on various conference-related tasks in order to bring the conference to this level.

Finally, we hope that the participants enjoy the outstanding conference program of the 8th International Conference on Information Technology Research, ICITR 2023.

I wish you all a very fruitful and rewarding conference!

Message from the General Co-Chair

Dr. I.T.S. Piyatilake Director Information Technology Research Unit



We are pleased to welcome you to the 8th International Conference on Information Technology Research (ICITR 2023) organized by the Information Technology Research Unit (ITRU), Faculty of Information Technology, University of Moratuwa. This year, we run the conference under the theme "The Next Evolution in Digital Transformation." The conference is well recognized as a forum to discuss the rapid advances in research and digital transformation development.

The research papers published in the proceedings are comprehensive in that they contain a wealth of information that is extremely useful to academics and professionals working in related fields. It is my pleasure to announce the participation of leading academics and researchers in their respective areas of focus from various countries at this event. The conference proceedings and the presentations made at ICITR 2023 are the end result of a tremendous amount of innovative work and a highly selective review process. This year, we received around 223 research articles, and 47 were accepted, maintaining an acceptance ratio of about 21%. ICITR 2023 is technically co-sponsored by the IEEE, the world's largest technical professional organization dedicated to advancing technology, and the IEEE Sri Lanka Section. All the accepted papers for the ICITR 2023 will be indexed in the IEEE Xplore Database. There will be "BEST PAPER AWARDS" for authors to recognize outstanding contributions and research publications.

We thank all authors for their participation, and we are happy that they have chosen IC-ITR 2023 as the platform to present their work. Credit also goes to the Program Committee members and review panel members for their contribution in reviewing and evaluating the submissions and for making ICITR 2023 a success. I wish all of you the very best in your future research.

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Keynote Speakers

Keynote Address 1



Prof. Sardar MN Islam SILC, Victoria University, Melbourne, Australia

Prof. Sardar M. N. Islam (Naz) is currently a professor at Victoria University, Australia. He is also a Distinguished Visiting Professor of Artificial Intelligence, UnSri Adjunct Professor of IT and Business, Armstrong Institute, Melbourne, and Editor-in-Chief of "International Transactions on Artificial Intelligence."

Prof. Islam is a highly motivated and committed academic with excellent international performance, as is evidenced through his outstanding publications, many Distinguished Visiting/Visiting Professor appointments, Keynote Speaker at a large number of international conferences, editorial roles in 11 good journals, and being a highly complex interdisciplinary researcher focused on advanced computational mathematical modelling and computer programming-based computer science, artificial intelligence, data science, and data analytics.

He has made a large number of publications, including 31 authored research books, 4 edited books, and about 250 articles in different disciplines such as computer science, artificial intelligence, business analytics, mathematics, law, etc. His academic work has gained a high international reputation and appreciation.

His qualifications include a Ph.D. (Australia), a CPA (Accounting), an LL.B. (Law), M. A. (First Class), M. A. (Canada), B. A. (Hons), and a Short Course on Counselling.

His current areas of interest and expertise are the following: Computer Science, IS, and Business Analytics: Quantum Computing, Artificial Intelligence, Robots/Robotics, Analytics, Machine Learning, Data Science, Python Programming, Blockchain, Cybersecurity, etc.; Their Advanced Mathematics and Statistics; and Their Applications in Biomedical Sciences, Bioengineering, Health, Business Disciplines, Engineering Management, Law, etc.

Keynote Title: Quantum Computing: Technologies, Programming, Applications, and the Future – Its Urgent Adoption

Abstract

In this presentation, the issues of quantum computing, quantum technologies, applications, and the future of mankind and the world will be discussed. A profoundly disruptive emerging computing technology, quantum computing, will change computation machines, algorithms, methods and technologies, transforming the world. Quantum computers have substantially different hardware and software and can solve complex, intractable problems exponentially faster than classical computers. The combination of quantum computing and artificial intelligence gives a new paradigm and many new opportunities for fundamental changes in the world. This transformative potential extends to many areas of life, including quantum health, artificial intelligence, financial modelling and management, cryptography, health care, and drug discovery, optimisation, climate modelling and weather forecasting. Quantum computing is expected to transform all areas of human life. It can address some of our most serious challenges. However, quantum computing has the potential to unlock new frontiers of knowledge in the future. This leaves us with a sense of urgency to adopt quantum computing by all for a better future for humanity and the world.

Keynote Address 2



Prof. Chung-Yih Wang Director of Department of Radiation Oncology, Cheng Hsin General Hospital, Taipei, Taiwan

Prof. Wang earned his Bachelor of Medicine from National Taiwan University Medical School and later pursued a Master's in Molecular Biology at the University of Wisconsin, Madison, followed by a Ph.D. in Microbiology and Immunology at the University of Michigan, Ann Arbor, Michigan. Prof. Wang's extensive career includes an internship at the National Taiwan University Hospital and post-doctoral research in immunology at Chicago University. Fluent in Chinese, Taiwanese, Japanese, Spanish, and Italian, with basic communication skills in French and German, Prof. Wang has held various academic positions, including Associate Professor at the Institute of Microbiology and Immunology, National Yang-Ming University. Currently serving as the Department Chief of the Department of Radiotherapy at Cheng Hsin Hospital, Taipei, his notable contributions to the scientific literature encompass studies on the radiosensitivity of liver metastatic tumor cells and the biological behavior of gold nano-core-encapsulated nanoparticles in tumor models. With a wealth of professional experience, Prof. Chung-Yih Wang continues to make significant strides in the fields of oncology and immunology.

Keynote Title: Bio-informatics: the future roadmap for the advancement of medicine

Abstract

From the dawn of human civilization, advancement of medical knowledge has always been an excruciatingly slow processes. Before the epoch of modern scientific method, discovery of new medication was a trial and error procedure, in which error denotes death, even for a successful trial, it was difficult, if not impossible to derive useful knowledge from.

With the coming of modern medicine, clinical trials based on scientific principles become the golden standard for the advancement of medical knowledge. Yet the procedure of modern clinical trials require tremendous time and resources to conduct. It is not unusual to take several decades plus astronomical sum of money for a potential novel treatment to go through pre-clinical trial to the phase III clinical trial. Much better than it was before, but it is not a game everyone can participate.

The advancement of informatics science in the recent decades is changing the traditional roadmap of medical advancement. Examples such as novel technologies for gene sequencing, protein structure prediction have contributed to the "quantum leap" of understanding and new treatment of diseases that were unsolvable enigmas a few decades ago. In addition, this added tool of informatics makes participation in the advancement of medical knowledge without tremendous resources possible.

Taken as an example of our initial research on Reinforced Learning in the hope of helping physician make better decision in patient treatment. I hope to demonstrate that this bio-informatics approach is a novel way for people / country with less resources to participate in the revolution of medical science.

Keynote Address 3



Prof. Chan-Yun Yang National Taipei University, Taiwan

Prof. Chan-Yun Yang received his B.Sc. and M.Sc. degrees from National Taiwan University, Taiwan, in 1985 and 1989, respectively, and got his Ph.D. degree in Bio-Industrial Mechatronics Engineering from National Taiwan University in 2001. He is currently a professor in the Department of Electrical Engineering at the National Taipei University, the director of the Intelligent Modeling and Control Laboratory at NTPU, and an associate editor of the Computer & Electrical Engineering Journal. His research focused on complex system modeling to reflect the real physical or biological facts behind the systems. Kinds of mathematical, statistical, and machine learning skills, together with inspirations directly from the facts, are often involved in his research

Keynote Title: Modeling semiconductor CMP polishing process by a physics-informed neural network

Abstract

The physical model of an underlying system is vital when people are managing to behave or interact with it. The speech introduces a method to do this kind of modeling work. In the era of big data, we often originate from data to solve the problem. However, the data-driven solution generates only numerical functionals to represent the model, with no physical facts behind it. An emerging technique, Physical Informed Neural Network (PINN), was recently developed to tackle the problem. With an example of the semiconductor Chemical Mechanical Planarization (CMP) process, the speaker will reveal the details of the modeling process as it was successfully realized recently by PINN. The insights of the modeling will also be examined in the speech to know PINN's attributes.

Programme Agenda

Day 1: 7th December, 2023

09.00 AM – 11.00 AM Workshop 1

Title "Advanced Machine Learning Techniques

for Processing Complex Data"

Resource Person Professor Dixon Vimalajeewa

Department of Statistics, Nebraska Lincoln

University, USA

01.30 PM - 03.30 PM Workshop 2

Title "Designing and Deploying

High-Performing Mission-Critical Apps on

AWS"

Resource Persons Mr. Chameera Dulanga

99X Technology

Mr. Lakindu Hewawasam

Enlear

Day 2: 8th December, 2023

| 07.45 AM – 08.30 AM | Registration of Participants |
|---------------------|--|
| 08:30 AM – 9:00 AM | Inauguration Ceremony |
| 09:00 AM – 10:00 AM | Keynote Address by Professor Sardar M. N. Islam Victoria University, Australia Topic: Quantum Computing: Technologies, Programming, Applications, and the Future - Its Urgent Adoption |
| 10:00 AM – 10:10 AM | Presentation by the Platinum Sponsor Cambio Software Engineering |
| 10:10 AM – 10:30 AM | Tea Break |
| 10:00 AM – 11:30 AM | Session on Agile Development by Cambio Software Engineering |
| 10:30 AM – 12:30 PM | ICITR Technical Session 1 ICITR Technical Session 2 ICITR Technical Session 3 ICITR Technical Session 4 |
| 12:30 PM - 01:30 PM | Lunch |
| 01:30 PM – 02:30 PM | Keynote Address by Professor Chung-Yih Wang Cheng Hsin General Hospital, Taiwan Topic - Bio-informatics: the Future Roadmap for the Advancement of Medicine |
| 02:30 PM – 04:50 PM | ICITR Technical Session 5 ICITR Technical Session 6 |
| 04:50 PM - 05:00 PM | Tea Break |
| 05:00 PM – 05:30 PM | Keynote Address by Professor Chan-Yun Yang National Taipei University, Taiwan Topic - Modeling Semiconductor CMP Polishing Process by a Physics-Informed Neural Network |
| 05:30 PM - 06:00 PM | Awards Ceremony |



Friday, 8th December 2023 ICITR 2023 Technical Session 1 - Computer Vision

Session Chairs Dr. Thushari Silva &

Mr. S.G.S.Hewawalpita

Time 10.30 AM – 12.30 PM

Time Title & Author (s)

10.40 AM – 10.55 AM Using Multispectral UAV Imagery for

Marine Debris Detection in Sri Lanka *Purushoth Velayuthan, Vinuri Piyathilake,*

Kavinda Athapaththu, Damitha

Sandaruwan, Asanka P. Sayakkara, Enosha

Hettiarachchi

10.55 AM – 11.05 AM Dominant Color Palette Extraction in

Resumes using the New Color Pixel

Quantifier Algorithm

N. N. Perera, S. P. Warusawithana, R. L. Weerasinghe, T. M. Hindakaraldeniya, G.

U. Ganegoda

11.05 AM – 11.20 AM Occlusion Resilient Similar-Colored

Separable Food Item Instance Segmentation Rukshan Karannagoda, Yomal Perera, Dion

Weiman, Subha Fernando

11.20 AM – 11.35 AM Generating Photographic Face Images from

Sketches: A Study of GAN-based

Approaches

K Kovarthanan, K M S J Kumarasinghe

11.35 AM – 11.50 AM Green Insight: A Novel Approach to

Detecting and Classifying Macro Nutrient

Deficiencies in Paddy Leaves D.M.G.D Rathnayake, K.M.S.J

Kumarasinghe, R.M.I.K. Rajapaksha,

N.K.A.C Katuwawala

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11.50 AM – 12.05 PM RiceGuardNet: Custom CNNs for Precise

Bacterial and Fungal Infection

Classification

N.K.A.C Katuwawala, K.M.S.J Kumarasinghe, R.M.I.K Rajapaksha,

D.M.G.D Rathnayaka

12.05 PM – 12.20 PM Cross-ViT: Cross-attention Vision

Transformer for Image Duplicate Detection

M.D.N. Chandrasiri, Priyanga Dilini

Talagala

ICITR 2023 Technical Session 2 - Artificial Intelligence

Session Chairs Dr. Rukshima Dabare &

Dr. Asanka Gunawardana

Time 10.30 AM – 01.00 PM

Time Title & Author (s)

10.30 AM – 10.45 AM Predicting the Performance of Electrical

Machines using Machine Learning V Joshi Manohar. Sumit Kumar Jha

10.45 AM – 11.00 AM Personal Loan Default Prediction and

Impact Analysis of Debt-to-Income Ratio *K.L.S Rodrigo*, *T. C. Sandanayake*, *A.T.P.*

Silva

11.00 AM – 11.15 AM Resume Content Scoring and Improvement

Suggestions Using NLP and Rule-based

Techniques

R.L. Weerasinghe, N.N. Perera, S.P.

Warusawithana, T.M. Hindakaraldeniya, G.

U. Ganegoda

11.15 AM – 11.30 AM ResBot: A Bi-Lingual Restaurant Booking

Conversational Artificial Intelligence *L.K.D. Fernand, G. U. Ganegoda*

11.45 AM – 12.00 PM Explainable AI Techniques for Deep

Convolutional Neural Network Based Plant

Disease Identification

Sashika Kiriella, Subha Fernando Sagara

Sumathipala, E.P.N. Udayakumara

12.00 PM – 12.15 PM Improved Particle Swarm Optimization for

Optimizing the Deep Convolutional Neural

Network

A.W.C.K. Atugoda, Subha Fernando

| 12.15 PM – 12.30 PM | Learning Application for Educational and Skills Development of Primary Children M.D.J. Malshika, N.S. Wijeratne, P.K.P. Kavishka, Bhagyanie Chathurika, Supipi Karunathilaka |
|---------------------|--|
| 12.30 PM – 12.45 PM | Classification of Fungi Images Using Different Convolutional Neural Networks U.M.M.P.K. Nawarathne, H.M.N.S. Kumari |
| 12.45 PM – 01.00 PM | Enhancing DDoS Attack Detection via Blending Ensemble Learning C.R. Joseph Amalraj, P.G.G. Madhusankha |

ICITR 2023 Technical Session 3 - Data Science & Data Driven Applications

Session Chairs Dr. Sadun Dassanayake &

Dr. Sagara Sumathipala

Time 10.30 AM – 12.00 AM

Time Title & Author (s)

10.40 AM – 10.55 AM Alzheimer's Disease Prediction Using

Clinical Data Approach

L.R.D. Perera, G.U. Ganegoda

10.55 AM – 11.05 AM Alzheimer's Disease Detection Using

Blood Gene Expression Data G.D.S. Yasodya, G.U. Ganegoda

11.05 AM – 11.20 AM Performance Improvement of Proxy Server

Cache Management Using Web Usage

Mining

Thasan Leenas, H.A. Caldera

11.20 AM – 11.35 AM Modeling Sri Lankan GDP Using

Macroeconomic Indicators: An Approach Using Principal Component Analysis Sachini Karunarathne, Thilini Piyatilake

11.35 AM – 11.50 AM An Agile Project Management Supporting

Approach for Estimating Story Points in

User Stories.

K. Jithmini Wanigasooriya Arachchi, C.R.J.

Amalraj

ICITR 2023 Technical Session 4 - Technology Trends

Session Chairs Dr. Upeka Premaratne &

Dr. Romesh Thanuja

Time 10.30 AM – 12.50 PM

Time Title & Author (s)

10.40 AM – 10.55 AM Game-based Analytical Skills Testing for

Graduate Software Engineering

Recruitment

D.W.M.N.C. Dasanayake, T.C. Sandanayake, S.M.U. Premasiri

10.55 AM – 11.05 AM Cloud-based Weather Condition Monitoring

System using ESP8266 and Amazon Web

Services

Anes Mohamed, Gunaseelan Gunasegaran,

Daminda Herath

11.05 AM – 11.20 AM Intelligent IoT Daily Running Log with

OBD Data Monitoring and Alerts System *C.M.S. Madushan, Sondarngallage D.A.*

Sanjeewa, H.M.R.G. Herath

11.20 AM – 11.35 AM Real Time Energy Market for LV

Distribution Networks in Smart Grid Using

Blockchain Technology

N.S. Hasaranga, N.S.A.D.S. Nanayakkara,

W.Y.U.N. Botheju, D.S. De Silva

11.35 AM – 11.50 AM Blockchain-Based Software Subscription

and Licenses Management System Hithru De Alwis, Adeesha Wijayasiri, Shamila De Silva, Kasun De Silva

| 11.50 AM – 12.05 PM | AI-Driven User Experience Design: Exploring Innovations and Challenges in Delivering Tailored User Experiences Prasadini Padmasiri, Pramukthika Kalutharage, Nethma Jayawardhane, Jagath Wickramarathne |
|---------------------|--|
| 12.05 PM – 12.20 PM | A Robotic Hand for Rehabilitation of Wrist and Fingers W.A.K.C. Weerasoory, U.R.E. Kumasaru, H.M.W. Nipun, H.H.M.J. De Silva, R.K.P.S. Ranaweera, R.A.R.C. Gopura |
| 12.20 PM – 12.35 PM | ITConnect: Real-time Personalized Job Posting Platform for IT Professionals Karunanayake K.R.D.S.K., Chandrawansa K.T.M., Gunatilleke L.C.T., Menuranga K.Y.D.B., Asiri Gawesha, Kalpani Manathunga |
| 12.35 PM – 12.50 PM | IoT Empowered Open Sensor Network for Environmental Air Pollution Monitoring System in Smart Cities BH Sudantha |

ICITR 2023 Technical Session 5 - Computing

Session Chairs Prof. Chung-Yih Wang &

Dr. Dushyanthi Vidanagama

Time 02.30 PM – 04.50 PM

Time Title & Author (s)

02.40 PM – 02.55 PM Acoustic Signature Analysis for

Distinguishing Human vs. Synthetic Voices

in Vishing Attacks

Prarthana Gamage, Dushan Dissanayake, Niroopama Kumarasinghe, Gamage

Upeksha Ganegoda

02.55 PM – 03.05 PM Local Planning of an Autonomous Driving

Car Prototype

A.M. Amrith, A.L. Faris, M.H.A.A. Madhi,

Chathurika S. Silva

03.05 PM – 03.20 PM Leveraging Artifact Reputation Analysis

and Contextual Sentiment Analysis for Advanced Detection of Vishing and

Smishing Attacks

Dushan Dissanayake, Prarthana Gamage,

Niroopama Kumarasinghe, Gamage

Upeksha Ganegoda

03.20 PM – 03.35 PM Multi-Modal Defect Detection System for

Single Color Fabrics in the Apparel

Industry

Vimeshi Silva, Thilakshi Senevirathne, Nifla Fareed, Thanuja Sandanayake, Indika

Karunaratna

03.35 PM – 03.50 PM Version Controlling of User Content in

Learning Management Systems for

Supporting the Teaching/Learning Process. *Mohamed Fazil Mohamed Firdhous, Walid*

Elbreiki, Chaman Wijesiriwardana

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03.50 PM – 04.05 PM Time analysis side channeling attack in

symmetric key cryptography

M.J. Hettiarachchi, H.H.G.D. Sandanuwan, R.W. Balasooriya, R. Hettiarachchi, K.Y.

Abeywardena, K. Yapa

04.05 PM – 04.20 PM ROS-based Mobile robot PID and MPC

control

Pei-Lun Chiang, Yu-Chi Wu, SSU-CHIEN,

CHEN, Chan-Yun Yang

04.20 PM – 04.35 PM Enhanced Timetable Scheduling: A

High-Performance Computational

Approach.

Asanka Sovis, Chathuni Patikirige, Yohan

Pandigama

ICITR 2023 Technical Session 6 - Artificial Intelligence

Session Chairs Professor Chan-Yun Yang &

Dr. Thilina Thanthriwatte

Time 02.30 PM – 04.30 PM

| Title & | & Author | (s) |
|---------|----------|----------------|
| | Title & | Title & Author |

02.30 PM – 02.45 PM Accelerated Adversarial Attack Generation

and Enhanced Decision Insight

N.K.Y.S. Kumarasiri, S.C. Premaratne,

W.M.R.M. Wijesuriya

02.45 PM – 03.00 PM The Application of Convolutional Neural

Network In The Context Of Tamil Handwritten Character Recognition Ponraj Thuvarakan, Parameswaran

Kowreesan, Satkunaratnam Jeyarooban, M. Janotheepan, E. M. U. W. J. B. Ekanayake

03.00 PM – 03.15 PM Layout Aware Resume Parsing Using NLP

and Rule-based Techniques

S.P Warusawithana, N.N. Perera, R.L. Weerasinghe, T.M. Hindakaraldeniya, G. U.

Ganegoda

03.15 PM – 03.30 PM Multiple Objective Optimization Based

Dietary Recommender System

Yomal Perera, Rukshan Karannagoda, Dion

Weiman, Subha Fernando

03.30 PM – 03.45 PM Detecting Tabnabbing Attacks Via An

RL-Based Agent

Ashani Fonseka, Pamali Pashenna, Subhash

N. Ariyadasa

03.45 PM – 04.00 PM Early Identification of Deforestation using

Anomaly Detection

Nethmi Wijesinghe, Rashmi Perera, Nethmee Sellahewa, Priyanga Dilini

Talagala

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04.00 PM – 04.15 PM InPRA – An Intelligent System for Writing

while Doing Research

Asoka Karunananda, Thushari Silva

04.15 PM – 04.30 PM Optimization of Real Time Panel Trip

Detection in Industrial Systems Using IoT

and Mathematical Modeling

Thushani Mallikarathne, Hashan

Abeysinghe, Chamod Rathnayake, Dilki

Gauder