## <u>Tutorial on Explainable Machine Learning</u> International Conference on Industrial and Informational Systems

A very good morning to all of you. I cordially welcome you all for the post-conference tutorial on Explainable Machine Learning, of 16th IEEE International Conference on Industrial & Information Systems, ICIIS 2021.

The theme of this year's IEEE International Conference on Industrial & Information Systems is "Deep Learning for Deep Understanding". Accordingly, this post-conference tutorial is focused on Explainable Machine Learning which has been one of the most trending topics. To the best of our knowledge, we are discussing this topic at a platform like this for the first time.

Today's tutorial will be focused on introducing the methods for the explainability of Machine Learning models, giving hands-on experience on the tools, and discussing prospects of applications of the introduced methods.

To start off the event, first, let me introduce the resource persons for the tutorial.

Dr Kasun Amarasinghe is a Postdoctoral Research Associate at Carnegie Mellon University, working with Prof. Rayid Ghani. Prior to joining CMU, he received his PhD in Computer Science from Virginia Commonwealth University in 2019 and his BSc. (Hons) in Computer Science from the University of Peradeniya, in 2011. His current research lies in the intersection of Machine Learning and Public Policy, and his research interests include machine learning-based decision support systems, their societal impacts, and their interpretability. Sir, it's with great honour I welcome you to this event.

Moving on to our next resource person, Dr Damayanthi Herath graduated with a B.Sc. (Hons) in Computer Engineering, from the University of Peradeniya in the year 2012 and is a member of IEEE. She was a member of the Optimisation and Pattern Recognition Research Group, of Melbourne School of Engineering, Australia where she worked on computational models and methods, to profile inherently diverse DNA sequencing data, which encode genetic information of multiple species and organisms. She is currently a senior lecturer at the Department of Computer Engineering, University of Peradeniya. Her research interests are in applied machine learning, especially in areas with social impact. Madam, it's my pleasure to welcome you today.

Mr Shyaman Jayasundara received the B.Sc. degree in Computer Engineering from the University of Peradeniya, in the year 2020. He is currently a full-time Research Assistant at the Agricultural Biotechnology Centre at the University of Peradeniya. His

research interests include machine learning applications in bioinformatics and health informatics. Mr Shyaman Jayasundara, it's our pleasure to have you here today.

Lastly, I would like to welcome our final resource person for today's event Mr Amila Indika, who graduated with a B.Sc. (Hons) in Computer Engineering, from the University of Peradeniya, in 2020. He is currently employed as a lecturer on contract at the Department of Computer Engineering, University of Peradeniya. His research interests are in applied machine learning, time-series analysis, and mathematics.

So without further ado, I would like to invite Dr Kasun Amarasinghe to take on the platform. Over to you sir.

Thank you. It's beyond doubt that today's event was indeed an insightful one that kept our minds whirling, throughout. Therefore, once again I would like to thank all the resource persons for joining us today. We have prepared a virtual token of appreciation for each one of you to express our sincere gratitude.

Dr Kasun Amarasinghe share screen
Mr Shyaman Jayasundara share screen
And, Mr Amila Indika share screen

Thank you very much for your immense support and contribution to the tutorial. And a special thank goes to Dr Damayanthi Herath for organizing the event.

With that note, we have reached the end of today's event. Thank you very much for joining us. Have a nice day!