

Industry Partnership Morning 12 November

14:00 Introduction and Overview of SFI Centre for Research Training in Machine Learning
Centre Director Brian Mac Namee

14:10 Improving COVID-19 contact tracing using Machine Learning Main room
Chair: Brian MacNamee, Centre Director
Speakers: Jack Nicholls, Niamh Belton

ML for LANGUAGE Room 1
Chair Georgiana Ifrim, Centre Co-Director in UCD

Emotions and synthetic text
Alan Cowap

Injecting structured knowledge into pretrained language models
Chenyang Lyu

14:20 **Event detection on social media**
David Kilroy

Enhance and Improve the accuracy on short text mining with external knowledge
Kithsiri Jayakody

Confusion detection in situated dialogue of human-robot interaction
Na Li

Efficient neural machine translation
Wandri Jooste

ML APPLICATIONS Room 2
Chair Brian Mac Namee, Centre Director

High level control of timbre synthesis
Anastasia Natsiou

Time series techniques for return to play predictions using wearable sensor data
Bahavathy Kathirgamanathan

Predict and optimise desalination plant behaviour under varying operating conditions
Bashayar AL Mukhaini

Using Machine Learning to support physical exercise, particularly for marathon running
Ciara Feely

Learning to solve electric vehicle routing problems
James Fitzpatrick

Unbiased news recommender system
Qin Ruan

14:45 Industry Partnership Main room
Sarah Jane Delaney, Centre Co-Director in TU Dublin

DEEP LEARNING for COMPUTER VISION Room 3
Chair Noel O'Connor, Centre Co-Director in DCU

Mapping slums with Machine Learning
Agatha Mattos

Machine Learning against cardiovascular diseases
Carles Garcia-Cabrera

14:55 **Assessing the condition of Irish pavements (road surfaces) using computer vision & machine learning**
Ibrahim Hassan

Spatial and temporal representation learning from videos
Lê Khắc Hồng Phúc

Unsupervised learning with graph neural networks
Yasser Abdelaziz Dahou Djilali

EXPLAINABLE ML Room 4
Chair Sarah Jane Delaney, Centre Co-Director in TU Dublin

Using knowledge graphs to improve data quality in Machine Learning
Aparna Nayak

Explaining with cases: computational & psychological explorations in explainable AI
Courtney Ford

Explaining recurrent neural network with rules
Sagar Saxena

Time series classification with explanation
Trang Nguyen

Aligning knowledge graphs and deep learning networks for insights and reasoning
Xuehao Liu

15:20 CLOSING
Noel O'Connor, Centre Co-Director in DCU