

# Machine Learning Workshop 2 | May 16, 2019 | Program

## Introduction | 10:00

### Session 1 | 10:10

Graham Appleby  
Helmholtz-Zentrum Dresden-Rossendorf (HZDR)  
Center of Advanced Systems Understanding (CASUS)

Guido Juckeland  
Helmholtz-Zentrum Dresden-Rossendorf (HZDR)  
Helmholtz Artificial Intelligence Cooperation Unit (HAICU)

Nico Hoffmann  
Helmholtz-Zentrum Dresden-Rossendorf (HZDR)  
Learning partial differential equations via neural networks

Stefan Ecklebe  
Technische Universität Dresden  
Model identification for process control applications using machine learning

Lena Jurkschat  
Competence Center for Scalable Data Services and Solutions (ScaDS)  
NER on financial documents

Andreas Gocht  
Technische Universität Dresden  
A New Approach for Automated Feature Selection

**Lunch Break | 11:45**

### Session 2 | 12:30

Norman Koch  
Competence Center for Scalable Data Services and Solutions (ScaDS)  
Automatic highly-parallelized hyperparameter-optimization  
for Machine Learning Algorithms

Andreas Knüpfer  
Technische Universität Dresden  
The HP-DLF Scalable Node-Parallel Deep Learning Framework

Stefan Reitmann  
Deutsches Zentrum für Luft- und Raumfahrt (DLR)  
Usage of machine learning in modern data-based air traffic management

Bernhard Vogginger  
Technische Universität Dresden  
SpiNNaker2 - a Scalable Hardware Architecture  
for Real-time Neural Networks made in Dresden

Simon Walz  
Technische Universität Dresden  
Show me that 3D model of an LSTM Autoencoder with many units on multivariate data

Danell Quesada  
Technische Universität Dresden  
Statistical Downscaling of CMIP5 projections for Costa Rica  
employing Artificial Neural Networks

Lennart Schmidt  
Helmholtz-Zentrum für Umweltforschung (UFZ)  
Automated Quality-Control of Environmental Sensor Data

**Coffee Break | 14:30**

## Machine Learning Community 2nd Workshop

### Session 3 | 15:00

Frank Fitzek  
Technische Universität Dresden  
Tactile Internet

Sebastian Hahn  
Technische Universität Dresden  
Deep Structured Models for Semantic Segmentation of OCT-Scans of Oral Tissue

Sarah Schmell  
Biotechnologisches Zentrum, Dresden (Biotec)  
Automation of HER2 Gene Amplification Testing in Pathological Assessment

Felix Knorr  
Technische Universität Dresden  
How well can an SVM deal with noise and small samples

Peter Steinbach  
Max-Planck-Institut für molekulare Zellbiologie und Genetik (MPI-CBG)  
Adversarial Attacks on Medical Imaging Revisited

Ronald Tetzlaff  
Technische Universität Dresden  
Bio-inspired computing by Cellular Neuronal Networks

Pavol Mikolas  
Technische Universität Dresden  
Development of a machine learning classifier to identify ADHD in real-world clinical data

Sebastian Starke  
Helmholtz-Zentrum Dresden-Rossendorf (HZDR)  
Nationales Zentrum für Strahlenforschung in der Onkologie (OncoRay)  
Deep-learning based prediction of cancer recurrence risks

**Concluding Remarks and Discussion | 17:15**

Bus to Dresden Bühlau at 17:40  
Bus to Dresden Main Station at 18:13

#MLCdresden

