

Room 4

Session 2-4-1: GS15

Artificial intelligence and machine learning in precision engineering I

GS15-01 Data-Driven Feature Selection for Bearing Vibration Signal Using Correlation-Based Graph and Social Network Analysis, SeyedHesam Hosseinizadeh Mazloumi, Madhurjya Dev Choudhury, Yuqian Lu and Jaspreet Singh Dhupia

GS15-03 Investigation of energy consumption prediction for ultra-precision machine tools in machining small samples
Baolong Zhang, Zhicheng Xu, Wai Sze Yip and Suet To

GS15-04 Dynamic and Precise Localization of Near- Surface Defects in Composite Materials Using Shearography and Spatiotemporal Object Detection
GuanLin Li, Yao Hu and Qun Hao

GS15-05 The application of CNNs for angle measurement based on second harmonic generation
Zhiyang Zhang, Jiahui Lin, Ryo Sato, Hiraku Matsukuma and Wei Gao

Session 2-4-2: GS15

Artificial intelligence and machine learning in precision engineering II

GS15-06 Research on Misjudgments Caused by Indistinguishable Speckle Patterns in Bolt Looseness Detection
Lin Deng and Zhan Gao

GS15-10 Enhancing Optical Lateral Resolution through Deep Learning-Based Estimation of Zernike Coefficients from System Transfer Functions
Ming-Jie Liu, Y. Cheng, Y. Huang and L. Chen

GS15-11 Physical model-driven single-shot end-to-end absolute phase acquisition strategy
Yiming Li, M. Chen, C. Zhang, H. Wang, Z. Li, W. chen, F. Feng, X. Wang, W. Gui, X. Liang and X. Li

GS15-14 Development of crystalline lattice scale using scanning tunneling microscope (STM)
Daichi Yoshikawa, Kazushi Iio and Masato Aketagawa

Session 2-4-3: OS18

Advanced image processings and applications

OS18-01 Object detection and recognition method of inland ships based on improved YOLOv8
Jigang Wu and Liuyang Zhou

OS18-03 Research on dynamic correction system for eye's aberrations based on image processing technology
Zhigang Jia, Weijiang Yan and Zhongxiang Zhang

OS18-04 Multiple moving object detection for stereo vision on single-board computer
Yoshito Yabuta

OS18-08 New vision-based evidence of the nature of vibro-impacts in an impact-damped boring bar
Janhavi Bhoge, Madhav Kumar, Hari Charan, Arjun Patel and Mohit Law