

Fault prediction and fault diagnostics of powertrain with AI technology

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Abstract: Reliability is a key factor in the power electronics systems and powertrains. As a pioneer in the field, ABB Motion devotes itself to optimizing the quality and reliability of powertrains including drives, electric machines, etc. To enable an excellent customer experience with a minimum downtime of powertrain, ABB Motion promotes the fault prediction and fault diagnostics of powertrain with AI technology years ago. Comparing commercial scenarios, industrial applications require higher accuracy and time sensitive for AI algorithms. The presentation shares the opportunities and challenges in the industrial data analytics area.

Bio: Jinlei Meng, Ph. D., is a Senior Data Scientist at Motion Research Team China in Motion Business Area, ABB. Jinlei Meng graduated from Huazhong University of Science and Technology in Automation, and from University of Chinese Academy of Sciences with Doctor of Philosophy in Power Electronics, in 2009 and 2015, respectively. Mr. Meng works for ABB since 2015. His interesting areas include prognosis and health management of power electronics systems, data analytics on powertrain, and intelligent manufacturing.