6th International Workshop on Quantitative Approaches to Software Quality

Key Note Speaker

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Intelligent Fault Diagnosis and Prediction through Data Analytics

Abstract

Although a range of quality assurance measures have been taken, in reality released software and service systems could still contain faults and fail in operation. In the era of big data and artificial intelligence, we aim towards intelligent, data-driven fault diagnosis and prediction. During the development and maintenance of software and services, a vast amount of data is generated. These data include operation logs, historical failures, metrics, etc. Various machine learning and data analytics techniques can be utilized to mine these data to predict failures, prioritize testing resources, and automate fault diagnosis. As a result, software/service reliability and availability could be improved. In this talk, I will briefly introduce some of my recent work on data-driven fault diagnosis and prediction.