Trusted Software and System

【题目】：Reasoning-based software engineering for dependable autonomous systems

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【摘要】：Learning-autonomous systems such as autonomous vehicles, bots, virtual doctors, realize the long-lasting vision in which machines make informed and intelligent decisions by themselves in highly complex environments. A central challenge today is how to make such systems justifiably trustable.
Software is the core ingredient of most of these systems, and ensuring its quality in the development and operation of these systems is particularly challenging. The boost of ML fostered a human-machine co-design view to develop highly dependable systems: ML algorithms are able to search for interesting patterns in large datasets gathered throughout the system lifecycle, thus supporting several software engineering tasks especially aimed at fault avoidance (e.g., through testing), fault removal (e.g., debugging), fault tolerance and prediction.

演讲时间
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18 : 30

演讲地点
腾讯会议
（701-230-641）

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【主讲人】：Roberto Pietrantuono 于 2009 年获得意大利那不勒斯大学计算机与自动化工程博士学位。他是意大利那不勒斯大学的助理教授。 他的研究兴趣包括软件可靠性工程领域，尤其是关键系统的软件验证、软件测试和软件可靠性分析。 他是 IEEE 的高级会员。