

当前的AI系统没有能力处理工业环境的动态和多变的本质，如果整个系统不定期重新训练或修改，就会导致性能随着时间而下降。这就是终身AI学习概念的运用所在。

Current AI systems are not equipped to handle the dynamic and constantly changing nature of the industrial environment, leading to decreased performance over time if the entire system are not retrained or modified periodically. This is where the concept of lifelong AI learning comes into play.

核心技术和平台优势 Core Technologies & Advantages

数据增量
Data Incremental

快速实施并长期持续改进
Quick Implement and continuously improving in long-run

小数据 大数据
Small Data Big Data

类别增量
Class Incremental

针对新任务或类别的可扩展AI
Scalable AI for new tasks or classes

如新的缺陷类型
e.g., new defect


领域增量
Domain Incremental

不断改进 AI 以适应生产线上的变化
Continuously improving AI to adapt changes in production

如传感器退化
e.g., sensor degrades

 **自我改进**
Self-improving

随著生产线在长期运行期间积累数据时自动更新
Updated automatically over time while data is accumulating from production line


 **可扩展**
Scalable

可快速地针对新任务或类别进行扩展，而不会降低前任务的性能
Extendable for new tasks or classes quickly and easily without losing pervious tasks' performance


 **适应变化**
Adapt to changes

对环境变化具有鲁棒性，例如原材料供应商的变化
Robust to environment changes such as changes in raw material suppliers


应用场景和功能 Application Scenarios & Functions




半导体、PCB、面板显示器等品质检测
Quality inspection for semiconductors, PCB, panel display, etc.



用于装配自动化、杂货拣选等的工业机器人
Industry robots for assembly automation, groceries picking, etc.



基础设施的性能监控和预测性维护
Performance monitoring & predictive maintenance for infrastructures



工作场所的安全保障，例如跟踪员工位置、提醒环境危害
Workplace security and safety like tracking worker location, alerting environmental hazards