inchi × intel

AI Grades Science Labs Fairly And Cuts Teacher Workload

Smart Lab System



Smart Lab System by Inchi Tech provides fair, scalable AI lab grading that ***cuts review work and supports better instruction.***

Smart Lab System is an AI platform powered by Intel® technologies for secondary school physics, chemistry, and biology lab teaching and exams. Multi-camera video captures student experiments; on-device AI recognizes equipment and actions, scores key steps objectively, and produces short review clips plus automated reports for teachers. Schools can add new experiments through a low-cost annotation workflow combining active learning and large language models, with labeling cost reduced by up to 80% through OpenVINO™ optimization on Intel® processor-based systems.

Flexible deployment spans desktop edge devices (two desks, four video streams) and school edge servers with Intel® Xeon® processors (up to 50 desks and 100 concurrent streams). Pilots at leading Chinese middle schools achieved over 90% key-frame accuracy at 25-30 FPS, improving fairness, reducing teacher workload, and accelerating quality course development.[1]

intel ai
Intel® AI Edge Applications

Key Intel-Enabled Features

Fast Edge Inference

Privacy at the Edge

Low Latency AI

Edge Performance

- OpenVINO™ toolkit on Intel® Xeon® processors enables up to 25-30 FPS multi-camera lab assessments.
- On-premises edge AI on Intel® platforms helps keep student experiment data private on campus.
- Intel® Core™ processors and Intel® Xeon® processors support low-latency AI for real-time lab action scoring.
- Scale from 2 desks on edge devices to up to 50 desks on a single Intel® Xeon® processor-based server.

By leveraging Intel® technologies, Smart Lab System by Inchi Tech addresses fairness, auditability, and teacher workload challenges in manual science lab assessments.

Ordering Guidance:

- Contact Us

Country/Geo: People's Republic of China

Edge Verticals: Education

Edge Use Cases: Smart Classroom; Smart Campus; Digital Campus; Intelligent Learning

Learn more:

- Inchi Tech Website

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[1] Intel does not control or audit third-party data. You should consult other sources to evaluate accuracy.