OBELISK

AI Ecosystem

LABTRONIC

Overview

Labtronic's revolutionary **AI-powered software ecosystem** is designed to enhance the applied research and education experience. Tailored for both educational and research applications, this cutting-edge system integrates seamlessly with our experimental trainers, empowering professors and students with unprecedented levels of **innovation**, **efficiency**, and **customization**.

Our innovative ecosystem is the first worldwide and consists of an advanced Learning Management Systems (LMS), Control Hub, AI Lab Assistant, Simulation Labs, and AR/VR Labs, creating an all-in-one platform that bridges theory and practice. All powered with our versatile AI **Obelisk™**.

Purpose

This novel technology focuses on:

1. **Optimizing lab workflow** with AI-powered automation for grading, feedback, and analytics.
2. **Expanding research capabilities** with robust integration with established scripting engines.
3. Offering students a more **engaging**, **accessible**, and **risk-free** learning environment with virtual and augmented reality experiments.
4. **Providing secure**, **modular tools** that adapt to diverse engineering disciplines.

Key Tools

Labtronic LMS

A centralized hub for **instructors** to design course labs, monitor student progress, and automate grading with **tailored** feedback powered by our robust AI **Obelisk™**.

Grading Rubrics

Interactive Tutorials

Customizable Quizzes

Connects to All Tools

Individual Student Feedback

Key Tools

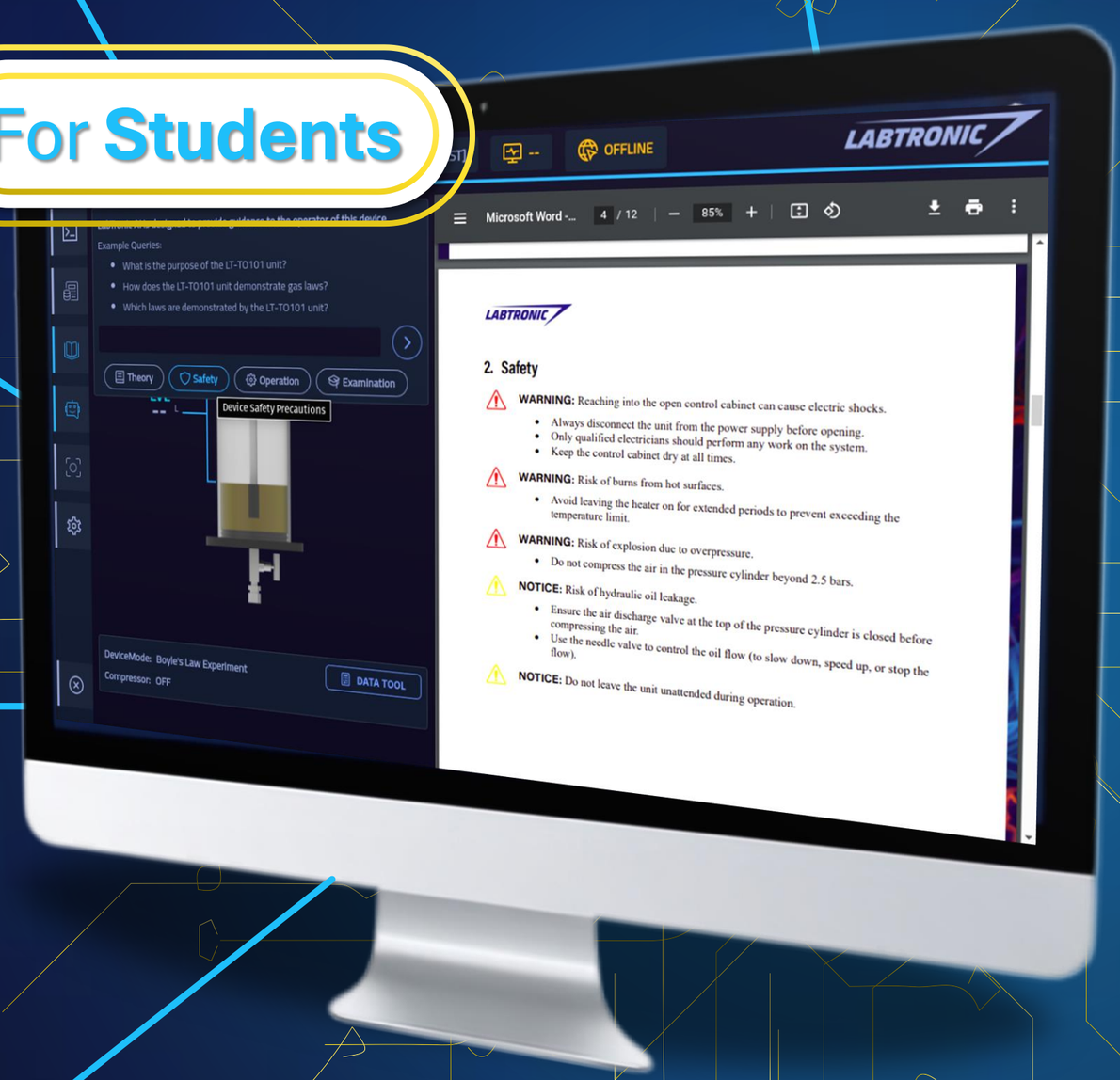
Control Hub

For intelligent trainer control, with tailored **students** and **researcher** versions, paving the way for an **efficient** and **adoptive** learning environment.

Real-time Data Visualization

Trainer Control

For Students



Easy Lab Report Generation

Integration with Spreadsheets Softwares

Access to Obelisk Lab Assistant

Key Tools

For Researchers

Control Hub

User-defined Functions & Charts

Visual Coding

Simulation Engines Integration

Built-in Scripting Engine

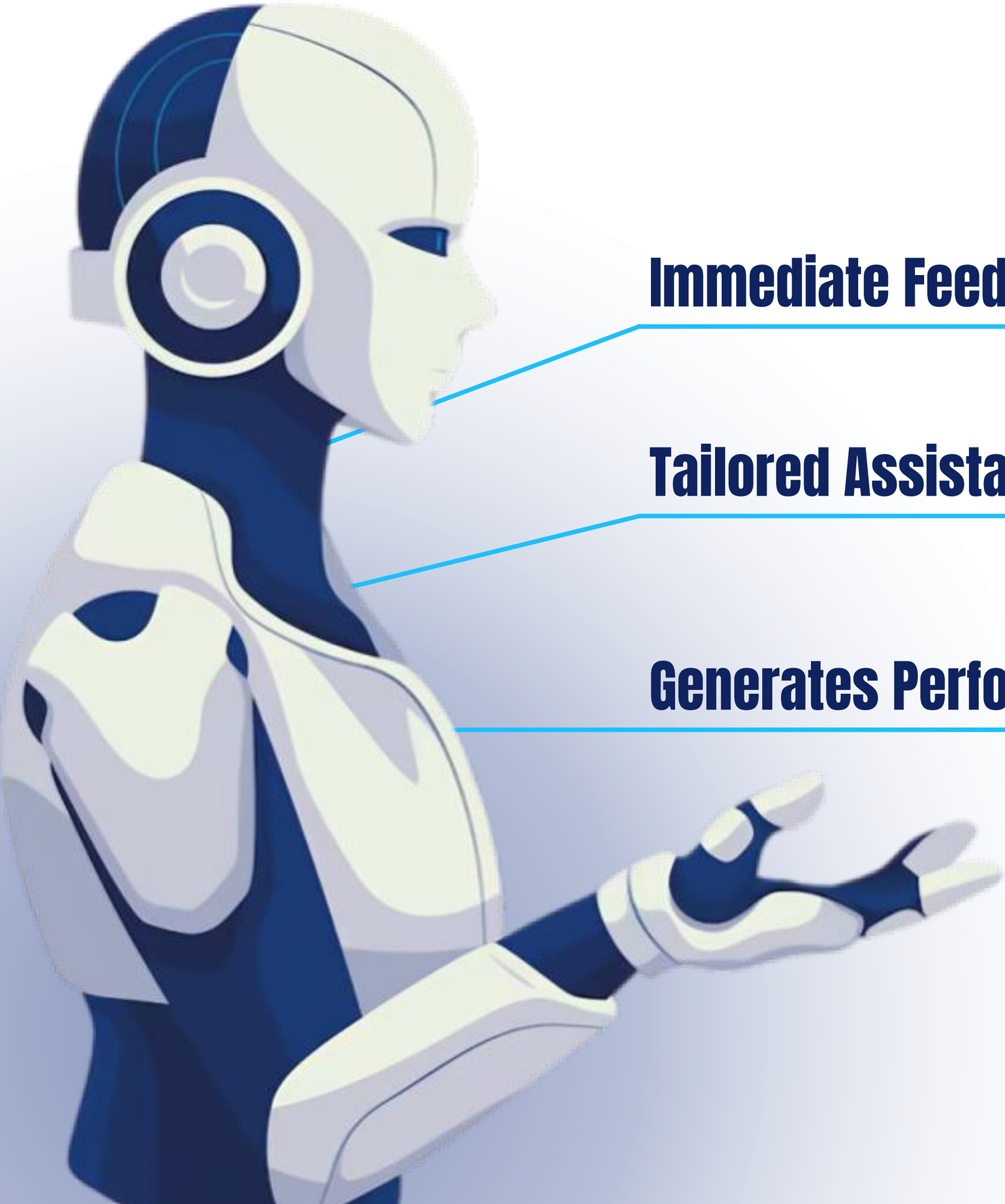
Tailored to Various Research Laboratories

Key Tools

AI Lab Assistant

Personalized, **context-aware** guidance for students during experiments, along with advanced analytics for professors. Powered by **Obelisk™**.

The Assistant in not meant for replacing human interaction, but to enable more valuable human-to-human interaction.



- Immediate Feedback to Students
- Tailored Assistance to Each Student
- Generates Performance Analytics

Key Tools

AR/VR Labs

Immersive, **sustainable** solutions for risky or resource-intensive experiments.

- Practising on High-Accuracy Experiments
- Life-Like, Engaging Experience
- Safe when Risky

Key Tools

Simulation Labs

Virtual environments for students to practice experiments **safely** and **efficiently**, even beyond lab hours or resource limitations.

Freedom

To Experiment Beyond Physical Limits

More **Fun** in Less **time**

24/7

Global Access

Features

01

AI-Powered Grading

Automates evaluation, providing precise, customized feedback while freeing instructors to focus on individual mentoring.

02

Customizable Assessments

Allows professors to design quizzes and assignments tailored to lab objectives and learning outcomes.

03

Real-Time Feedback

Ensures students can identify and correct mistakes during experiments, fostering a deeper understanding of concepts.

04

Integrated Data Analytics

Offers gap analyses and performance metrics to optimize curriculum design.

05

Enhanced Research Tools

Advanced scripting engines and user-defined equations empower researchers to extract actionable insights efficiently.

End-User Impact

Students

Access lab experiments anytime, anywhere, with simulation and VR tools.

Receive **personalized feedback** and interactive guidance for a richer learning experience.

Develop **hands-on skills** in a safe, controlled environment

Professors

Save time with automated grading and analytics.

Gain insights into student performance to **refine teaching strategies**.

Effortlessly manage lab **schedules** and course content.

Researchers

Utilize advanced tools to innovate and **customize** experiments.

Integrate seamlessly with MATLAB and Simulink for extended **functionality**.

Labtronic's AI-powered ecosystem is designed to inspire **innovation**, save **time**, and enhance **learning**.

LABTRONIC

Explore the future of Applied Research and Education today!

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