The Software/Hardware Integration Lab (LISHA) was founded in 1985 to promote research in the frontiers between hardware and software. Since then, it has dedicated considerable efforts to research in areas such as computer architecture, operating systems, computer networks and the related applications. Currently, the laboratory focuses on innovative techniques and tools to support the development of embedded systems.

LISHA is part of the recently created EMBRAPII Institute for Mobility Technologies (MOVE).

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SBESC 2021 and LADC 2021

LISHA hosted SBESC 2021 and LADC 2021, the reference conferences of Computer Engineering and Dependability in Latin America.

A new version of OpenEPOS has been released! Check the new features.

Open IoT Platform

LISHA's IoT Platform now supports dozens of research projects. For further information about how to join it, please check this link.

SmartData

A new version of LISHA's IoT Platform based on SmartData and the Trustfull Space-Time Protocol (TSTP) is now available!

SmartX

LISHA's CPS Management Platform is now fully integrated with the IoT Platform, adding features such as defect tracking, logging, geolocation, and service ticketing.
MCTIC's IA² Program

LISHA is now part of MCTIC's IA² Program. Prof. Gustavo Medeiros de Araújo will be working together with accelerators HARDS and DARWIN and SOFTEX to support startups while innovating with AI solutions to real problems.

application scenarios involving Artificial Intelligence and data analysis tools.

LISHA, Intelbras, and Yak for Vehicles@5G

LISHA, Intelbras, and Yak are working together on the utilization of low-level 5G protocols for vehicular telemetry and supervision within the paradigm of the Internet of Things (IoT).