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 **EMBRAPPI MOVE**

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

**SBESC 2021** and **LADC 2021**

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

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**OpenEPOS 2.2**

A new version of OpenEPOS has been released! Check the [new features](#).

**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.

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**LISHA and AQTech for Smart Energy**

LISHA and AQTech are working together to make hydroelectric power generators more intelligent. Prof. Fröhlich will lead a multidisciplinary team to develop advanced tools for predictive maintenance of large hydroelectric generators. Read more ...

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**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.