We are hiring! Check the positions currently open here!

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).

LISHA is part of EMBRAPII MOVE

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

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LISHA is a founding member of UFSC’s Research Center for Cyber-physical Systems Security (SecCPS).

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

Open IoT Platform

EPOS 2.2

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

Open IoT Platform

EPOS

Rota 2030 with Renault

LISHA and Renault are joining forces to develop innovative solutions for the automotive industry in the realm of Program Rota 2030. Prof. Giovani Gracioli will lead a team of experts at LISHA on the pursuit of an Intelligent Data Acquisition and Analysis System for Automotive Controllers.

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

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

SmartX

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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.

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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.