2025

PORTFOLIO

Evolução Institute of Science and Technology

Evolução
INSTITUTO

Content

Contact

Phone Numbers
(69) 3423-4992
(69) 9 9275-5316
contato@evolucaoinstituto.org.br

Office Hours
From 8:00 a.m. to 12:00 p.m. and from 2:00 p.m. to 6:00 p.m.
Monday to Friday

2022-2025

Our Projects

Developed by Evolução Institute of Science and Technology

Evolução
INSTITUTO

Bioeconomy

Biotechnology

Social

Social

2025

PORTFOLIO

BIOECONOMY

Evolução
INSTITUTO

Ecological Soap Project

Partner
IFRO – Ji-Paraná

Action
Training in the production of ecological soap as a strategy for environmental education and oil reuse in Ji-Paraná.

Objective
Promote the socio-environmental development of the Ji-Paraná community by offering a course on the production of recycled and ecological soap. The initiative also aims to raise awareness about the improper disposal of used cooking oil, encouraging responsible consumption and sustainable production practices (SDG 12).

Project Status

EXECUTED

Performance of Feedlot Cattle Using Feed Additives

Partner
Federal Institute of Rondônia – Colorado do Oeste Campus

Action
Performance evaluation of feedlot cattle using feed additives.

Objective
Assess the addition of an exogenous amylolytic enzyme (Amaize®) and the inclusion of non-forage fiber sources in a high-concentrate diet during the finishing phase of confined Nelore cattle. The hypothesis is that adding the enzyme combined with non-forage fiber sources in high-concentrate diets improves carcass gain and feed efficiency during the finishing stage in confinement.

Project Status

EXECUTED

AGRO – IoT Project

Action
Development of an electronic IoT ear tag with LoRaWAN technology for tracking and locating cattle, enabling real-time remote monitoring.

Objective
Apply the device to prevent theft, identify diseases, and control invasions in deforestation-prone areas.

The solution consists of three subsystems:

1. **Power supply:** solar cell and rechargeable battery;
2. **Communication:** via LoRaWAN;
3. **Sensors:** motion detection and GPS-based location.

Project Status

EXECUTED

AGRO – SAFRA Project

Action
Development of a Class C LoRaWAN IoT device for agricultural machinery, capable of collecting data through the CAN Bus port (ISO 11783/SAE J1939) and transmitting it to the server via LoRaWAN and Wi-Fi.

Objective
Optimize the performance of tractors and implements in soil preparation, planting, and harvesting stages by providing efficient monitoring of operational indicators.

Project Status

EXECUTED

Automated Counting Solution for Shrimp, Fish, and Other Hatchery Post-Larvae

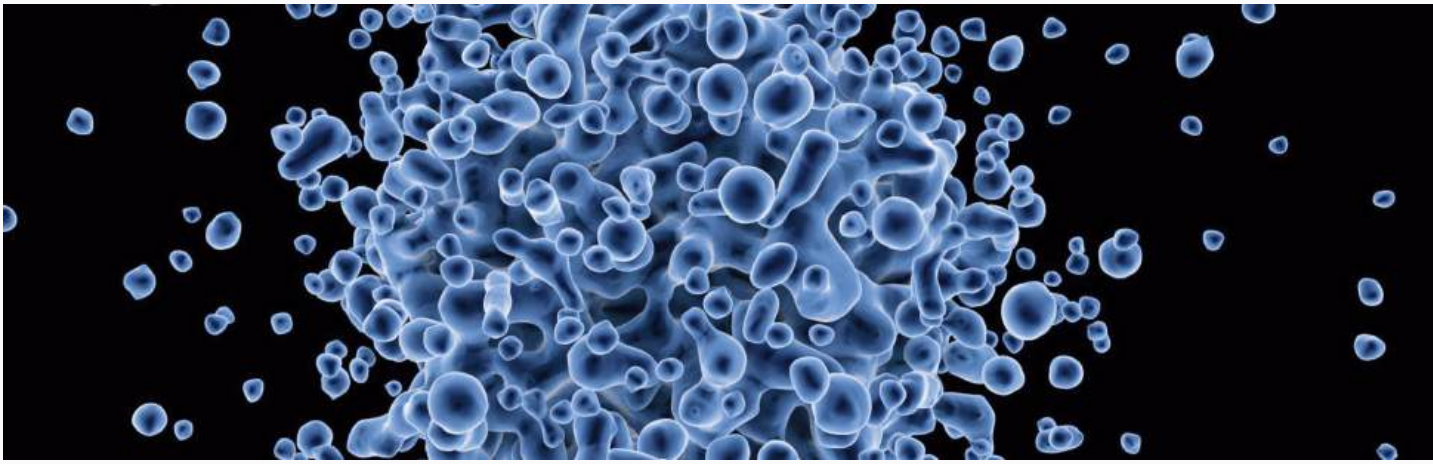
Action
Use of technology to calculate the number of individuals in a sample and extrapolate the total population in cultivation tanks.

Objective
Develop a computer vision-based solution to accurately estimate the number of shrimp post-larvae (PLs), fish, and other larval stages in controlled environments using artificial intelligence models.

The technique employs a standardized container with diffused LED bottom lighting and a fixed water layer thickness, ensuring homogeneous larval distribution.

Project Status

IN EXECUTION



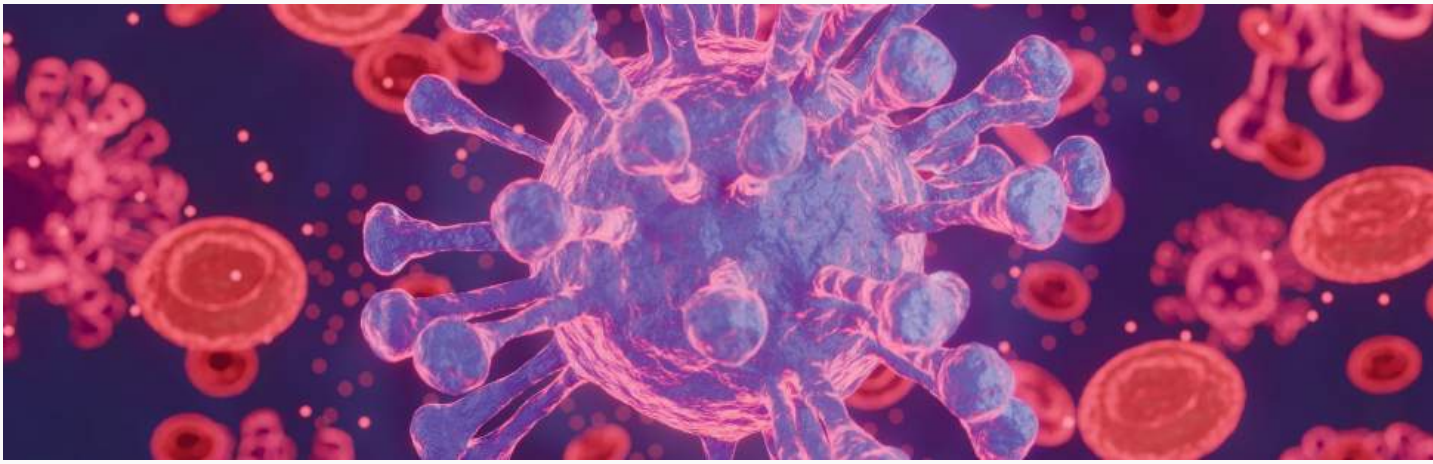
Genetic Tracking Project

Action
Use of technology for genetic tracking through the combination of RFID identification and individual genetic analysis.

Objective
Implement a traceability system (microtag) in which each specimen has a unique identification code. A tracking software records the complete reproductive history, linking phenotypic, genetic, and performance data. This enables laboratory technicians to monitor lineages, prevent inbreeding, control crossings, and maintain an organized genetic database to support breeding program decisions.

Project Status

IN EXECUTION



Waste Treatment and Reuse – EKOLIXO Project

Partner
Gaiakon

Action
Use of technology to eliminate urban waste in large cities.

Objective
Provide a complete and efficient solution for solid waste treatment. The project implements Waste Transformation and Valorization Units (UTVR120) capable of converting 100% of urban solid waste into products, by-products, and energy — eliminating the need for landfills and dumps.

Project Status

IN EXECUTION

Plastic Waste Treatment and Reuse – EKOLIXO Project

Partner
Gaiakon

Action
Use of technology to eliminate plastic waste and reconvert it into raw material.

Objective
Provide an efficient and comprehensive solution for plastic waste treatment through pyrolysis, using national technology with efficiency superior to international market standards.

Project Status

IN EXECUTION

Green and Intelligent Routes for Organic Waste Valorization

Action
Use of technology combined with the principles of Sustainable Chemistry and Artificial Intelligence to develop circular chains in the regional bioeconomy.

Objective
Develop an integrated system that combines green chemical routes and AI models to transform regional organic waste (peels, seeds, pulp, sludge, fibers, and residual biomass) into value-added products — such as biofertilizers, natural additives, and raw materials for civil construction — with digital tracking throughout the utilization chain.

Project Status

IN EXECUTION

2025

PORTFOLIO

BIOTECHNOLOGY

Evolução
INSTITUTO

DroneScan: Autonomous Inspection of Electrical Infrastructures

Action
Creation of an image capture, processing, and analysis platform for electrical infrastructures.

Objective
Apply the use of drones along predefined routes to capture RGB and thermal images of electrical components. Through the DSView platform, which manages field data collection, algorithms identify anomaly patterns in critical components.

Project Status

EXECUTED

Renewable Energy SPV Project: Solar Panel Fault Analysis

Action
Use of image capture for fault analysis in solar farms.

Objective
Employ aerial drone imaging to capture operational solar panels. Based on 2D images, 3D reconstruction using projection models allows the detection of visual and thermal anomalies. Captured data are correlated and integrated with inverters and climate sensors to enhance analysis and monitoring of solar farms.

Project Status

EXECUTED

Computer Vision: ARGOS Project

Action
Use of image capture for fault analysis in closed, remote, and critical environments.

Objective
Employ radiometric camera images to detect anomalies, identifying visual and thermal faults in restricted-access environments.

Project Status

EXECUTED

OpenMDX Web Software Project

Action
Create a flexible and scalable software platform for smart metering networks.

Objective
Develop a software platform integrating MDC and MDM modules, offering a unified and scalable solution for Advanced Metering Infrastructure (AMI) projects. The platform adopts a modular microservices architecture with orchestration via Kubernetes.

Project Status

EXECUTED

Cybersecurity Project – Data Protection

Action
Develop an intelligent monitoring platform.

Objective
Design an open-source platform for OT networks featuring traffic mirroring and correlation using machine learning, anomaly detection in teleprotection systems, and embedded artificial intelligence.

Project Status

IN EXECUTION

Telecom Project – Private LTE/5G Networks

Action
Modernize the power sector through private LTE/5G networks integrating technologies such as:

- IoT and smart metering (NB-IoT, CATM1)
- Augmented/Virtual Reality (AR/VR)
- Substation automation and teleprotection
- Critical communication (Push-to-Talk / Push-to-Video)

Objective
Validate a multi-platform and multi-technology solution focused on latency analysis (<10 ms), throughput (up to 960 Mbps), and scalability to thousands of simultaneous devices. The proposal includes integration with Wi-SUN and OpenMDX networks and multiple use cases: connected vehicles, smart badges, 5G CPEs, and AR field operations.

Project Status

EXECUTED

Intelligent Energy Consumption Forecasting System

Partners
CITS.AMAZONAS and Digiboard

Action
Development of an intelligent energy consumption forecasting system using Artificial Intelligence and Machine Learning.

Objective
Create an AI and ML-based solution to forecast energy consumption at Digiboard, optimizing processes, reducing operational costs, and increasing energy efficiency.

Project Status

IN EXECUTION

Ruinous Competition Project

Objective

“Ruinous competition” occurs when an excessive number of companies compete for the same service in a given region, generating economic unviability, profit reduction, and consequently lower service quality.

The main goal of this project is to identify and assess the presence of destructive competition among vehicle inspection companies, providing tools for regulatory agencies to conduct in-depth analyses to prevent sectoral instability.

Website
https://concorrenciaruinosa.evolucaoinstituto.org/

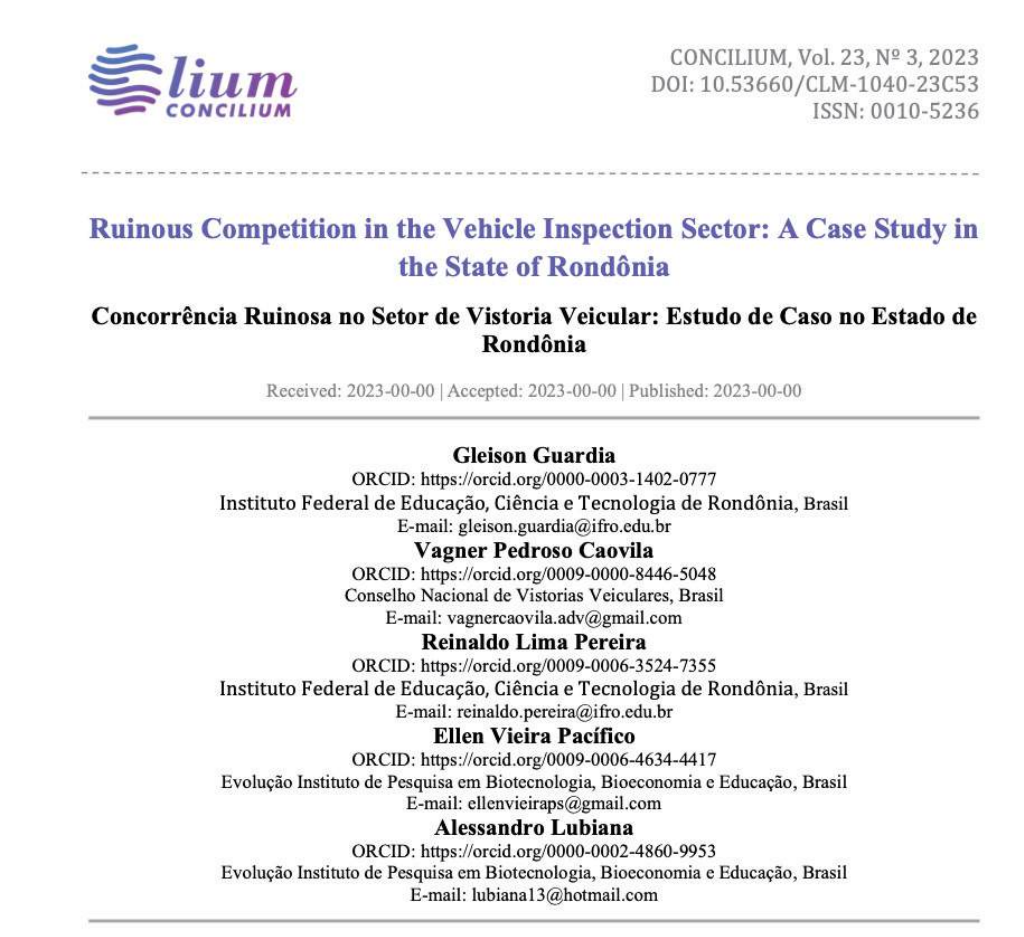
Project Status

EXECUTED

Ruinous Competition

Official Publication

The “Ruinous Competition in Vehicle Inspection Sector” study was published in the scientific journal Concilium (Vol. 23, No. 3, 2023), highlighting a case study conducted in Rondônia State. The publication recognizes its relevance to the sector’s economic viability and service quality.



CONCILIUM, Vol. 23, Nº 3, 2023
DOI: 10.53660/CLM-1040-23C53
ISSN: 0010-5236

Ruinous Competition in the Vehicle Inspection Sector: A Case Study in the State of Rondônia

Concorrência Ruinosa no Setor de Vistoria Veicular: Estudo de Caso no Estado de Rondônia

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Gleison Guardia
ORCID: https://orcid.org/0000-0003-1402-0777
Instituto Federal de Educação, Ciência e Tecnologia de Rondônia, Brasil
E-mail: gleison.guardia@ifro.edu.br
Vagner Pedroso Caovila
ORCID: https://orcid.org/0009-0000-8446-5048
Conselho Nacional de Vistorias Veiculares, Brasil
E-mail: vagnercaovila.adv@gmail.com
Reinaldo Lima Pereira
ORCID: https://orcid.org/0009-0006-3524-7355
Instituto Federal de Educação, Ciência e Tecnologia de Rondônia, Brasil
E-mail: reinaldo.pereira@ifro.edu.br
Ellen Vieira Pacífico
ORCID: https://orcid.org/0009-0006-4634-4417
Evolução Instituto de Pesquisa em Biotecnologia, Bioeconomia e Educação, Brasil
E-mail: ellenvieiraps@gmail.com
Alessandro Lubiana
ORCID: https://orcid.org/0000-0002-4860-9953
Evolução Instituto de Pesquisa em Biotecnologia, Bioeconomia e Educação, Brasil
E-mail: lubiana13@hotmail.com

Intelligent System for Industry 4.0

Partners
NANSEN and IFAM

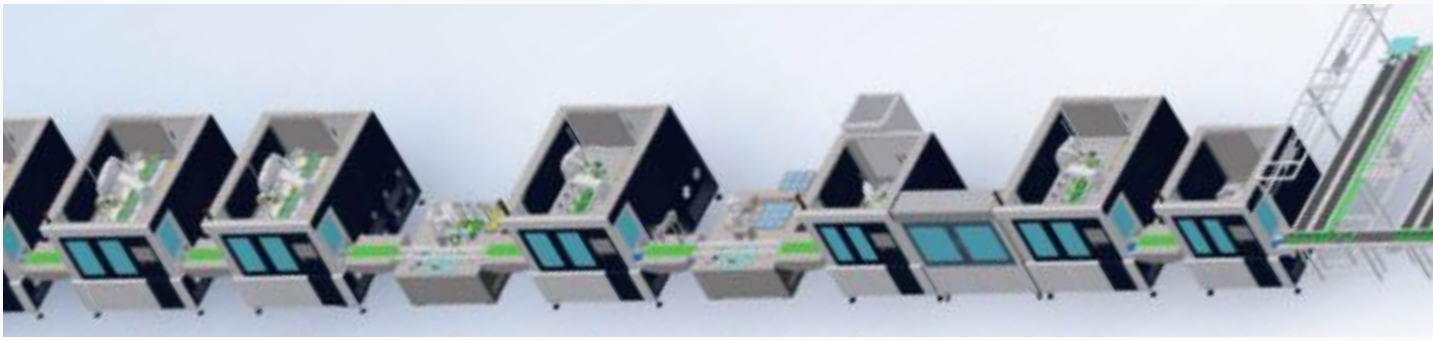
Action
Development of a robotic system for automation of energy meter assembly under Industry 4.0.

Objective
This R&D project, led by NANSEN, focuses on industrial modernization through Industry 4.0 technologies — IoT sensors, cyber-physical systems, cloud computing, and digital twins.

A collaborative robotic and Cartesian system was developed for automated component insertion and assembly, generating real-time data.
The project adopts a retrofit approach as an intermediate step between Industry 3.0 and 4.0, promoting system integration, predictive maintenance, and process optimization while enabling future AI applications.

Project Status

EXECUTED



Data Compression Algorithm for FUOTA

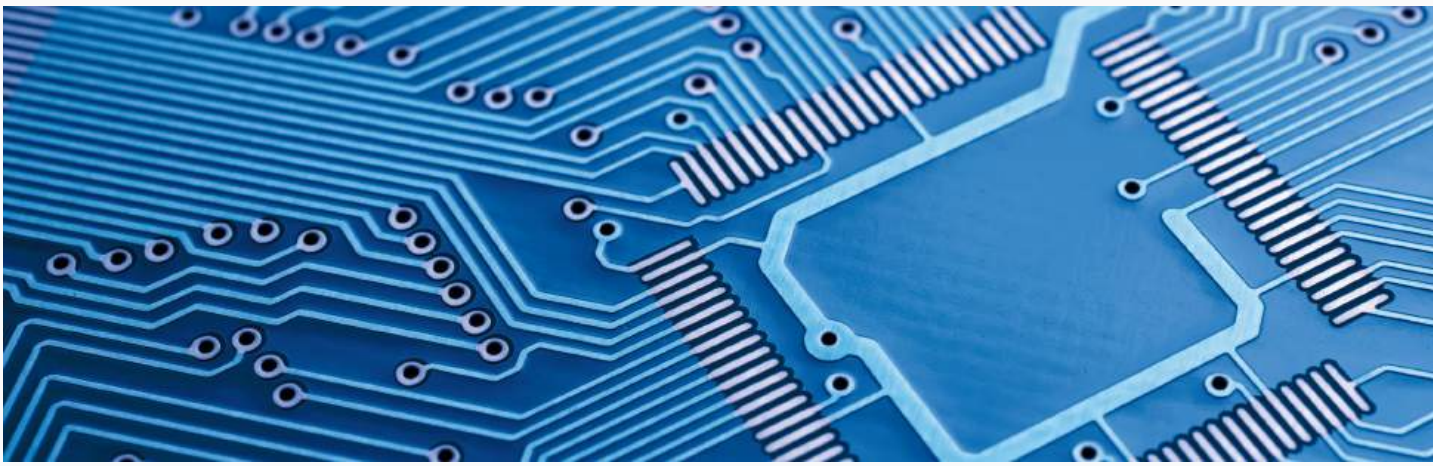
Partners
IFRO – Ji-Paraná and WASION

Action
Development of a data compression algorithm for FUOTA (Firmware Update Over The Air) and bulk memory transfer.

Objective
Develop an algorithm capable of compressing data transmitted during FUOTA processes and mass memory transfers, enhancing communication efficiency in embedded systems.

Project Status

EXECUTED



Data Compression Algorithm for FUOTA

Official Publication

The project focused on data compression for embedded devices was published in Aracê Journal (Vol. 7, No. 3, 2025), presenting innovative solutions to optimize energy meters in NB-IoT networks, emphasizing power consumption reduction and increased energy efficiency.

Revista ARACÊ

ISSN: 2358-2472

SMART METER DATA COMPRESSION: A SOLUTION FOR REDUCING AND OPTIMISING ENERGY METER RESOURCES IN NBIOT NETWORKS

https://doi.org/10.56238/arev7n3-270

Date of submission: 26/02/2025 **Date of publication:** 26/03/2025

Gleison Guardia[1], Rogério Guerra Diogenes[2], Iury Gonçalves França[3], Lucas Noé dos Santos Santana[4], Jamilly Cristina de Sousa[5], Brunna Conceição de Paulo[6], Antônio Ébano Rafael Machado de Oliveira[7] and Alberto Alexandre Moura de Albuquerque[8]

Instituto Federal de Rondônia

CAMPUS JI-PARANÁ

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MENU

Projeto desenvolvido em parceria com o Campus Ji-Paraná é publicado em periódico científico

O Instituto Federal de Educação, Ciência e Tecnologia de Rondônia (IFRO), *Campus* Ji-Paraná, participou de pesquisa com uma Multinacional Chinesa, a Wasion Group. O projeto foi financiado pela Wasion Group e enquadrado na Lei de Informática, Lei nº 8.387/1991 (Zona Franca de Manaus), em apoio com o Evolução Instituto, parceiro do Campus Ji-Paraná. Na ação, são envolvidos acadêmicos analistas e desenvolvedo sistemas.

Dentro da pesquisa, o Professor do Campus Ji-Paraná, Gleison Guardia explica: "fizemos um trabalho de compressão de dados para medidores de energia inteligentes, que consiste em fazer a leitura dos dados, armazenar, comprimir e transmitir reduzindo os custos de transmissão de dados da empresa. Tudo isso acontece dentro do medidor de energia, numa pequena placa controladora com pouca capacidade de processamento. Como resultado, tivemos o artigo publicado na revista Aracê

Innovation in Industry 4.0

Partners
UFAM and NANSEN

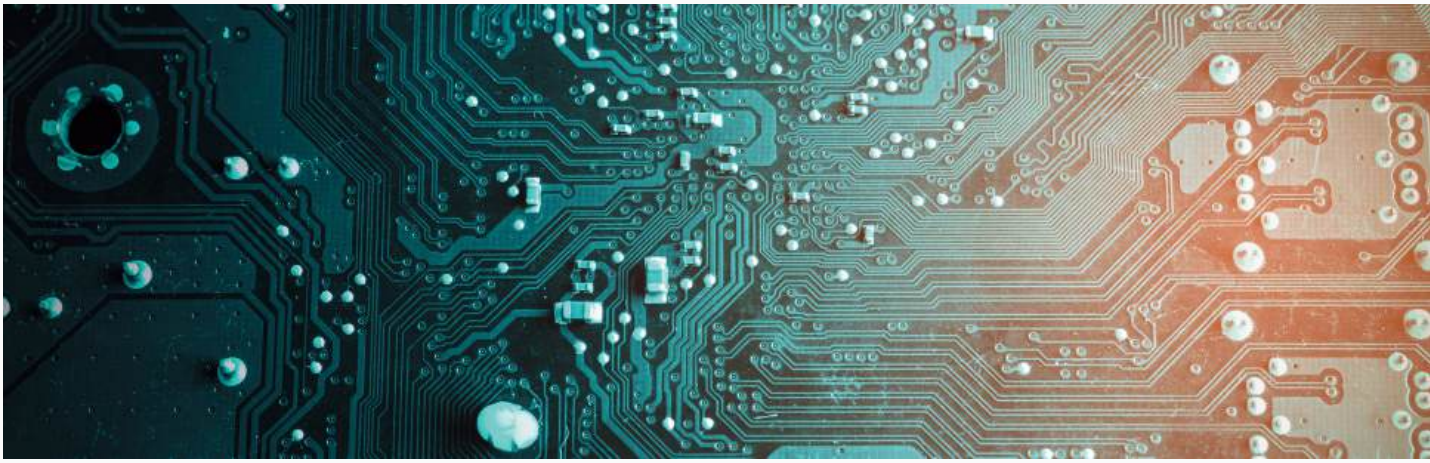
Action
Automated assembly system development.

Objective
Develop an automated assembly system that resulted in a scientific publication in the MDPI journal.

The study addresses industrial retrofit, digital twins, and intelligent automation, emphasizing technological advances in Industry 4.0.

Project Status:

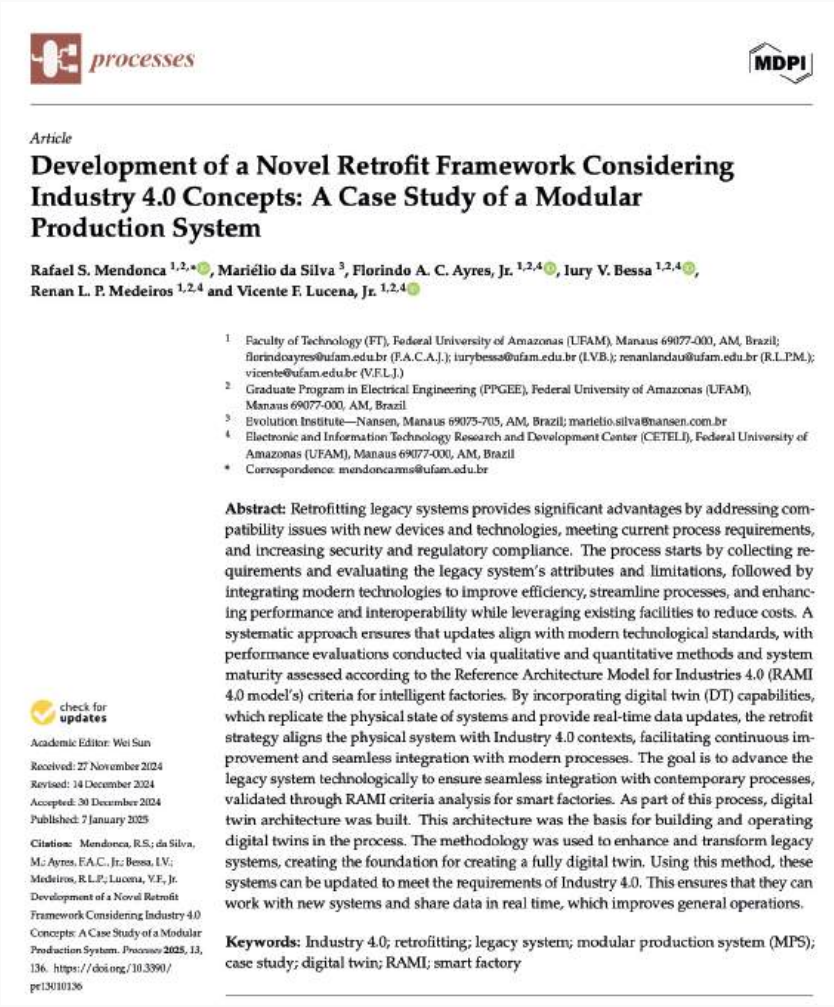
EXECUTED



Innovation in Industry 4.0

Official Publication

The project on modernization of legacy systems under Industry 4.0 concepts was published in the journal Processes (Vol. 13, 2025), presenting a novel retrofit framework applied to modular production systems.
The publication validates digital integration and the use of digital twins to create smart and efficient factories.



processes

MDPI

Article

Development of a Novel Retrofit Framework Considering Industry 4.0 Concepts: A Case Study of a Modular Production System

Rafael S. Mendonca [1,2,*], Mariélio da Silva [3], Florindo A. C. Ayres, Jr. [1,2,4], Iury V. Bessa [1,2,4], Renan L. P. Medeiros [1,2,4] and Vicente F. Lucena, Jr. [1,2,4]

1 Faculty of Technology (FT), Federal University of Amazonas (UFAM), Manaus 69077-000, AM, Brazil; florindoayres@ufam.edu.br (F.A.C.A.J.); iurybessa@ufam.edu.br (I.V.B.); renanlandau@ufam.edu.br (R.L.P.M.); vicente@ufam.edu.br (V.F.L.J.)
2 Graduate Program in Electrical Engineering (PPGEE), Federal University of Amazonas (UFAM), Manaus 69077-000, AM, Brazil
3 Evolution Institute—Nansen, Manaus 69075-705, AM, Brazil; marielio.silva@nansen.com.br
4 Electronic and Information Technology Research and Development Center (CETELI), Federal University of Amazonas (UFAM), Manaus 69077-000, AM, Brazil
* Correspondence: mendoncarms@ufam.edu.br

Abstract: Retrofitting legacy systems provides significant advantages by addressing compatibility issues with new devices and technologies, meeting current process requirements, and increasing security and regulatory compliance. The process starts by collecting requirements and evaluating the legacy system's attributes and limitations, followed by integrating modern technologies to improve efficiency, streamline processes, and enhancing performance and interoperability while leveraging existing facilities to reduce costs. A systematic approach ensures that updates align with modern technological standards, with performance evaluations conducted via qualitative and quantitative methods and system maturity assessed according to the Reference Architecture Model for Industries 4.0 (RAMI 4.0 model's) criteria for intelligent factories. By incorporating digital twin (DT) capabilities, which replicate the physical state of systems and provide real-time data updates, the retrofit strategy aligns the physical system with Industry 4.0 contexts, facilitating continuous improvement and seamless integration with modern processes. The goal is to advance the legacy system technologically to ensure seamless integration with contemporary processes, validated through RAMI criteria analysis for smart factories. As part of this process, digital twin architecture was built. This architecture was the basis for building and operating digital twins in the process. The methodology was used to enhance and transform legacy systems, creating the foundation for creating a fully digital twin. Using this method, these systems can be updated to meet the requirements of Industry 4.0. This ensures that they can work with new systems and share data in real time, which improves general operations.

Keywords: Industry 4.0; retrofitting; legacy system; modular production system (MPS); case study; digital twin; RAMI; smart factory

check for updates

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Visual Management: Energy Production Line and Test Laboratory

Partners
CITS.AMAZONAS and SAGEMCOM BRASIL COMUNICAÇÕES LTDA

Action
Implementation of an intelligent platform for temperature and humidity monitoring integrated with BI and AI systems.

Objective
Develop and implement an integrated management platform using Business Intelligence (BI) and Artificial Intelligence (AI) technologies to automate environmental control and monitoring within production lines and testing laboratories.

Project Status

EXECUTED

Management System for Vehicle Inspection Companies

Partner
Soluções Vistorias

Action
Development of a web platform for the integrated management of vehicle inspection companies.

Objective
The project aims to develop a web platform based on C# and the Blazor framework, designed for companies specialized in vehicle inspections.
The solution enables client and employee registration, expense control, payments, and receipts management, offering a centralized and efficient system to optimize the management and internal processes of these companies.

Project Status

EXECUTED

App Auto Security Vehicle

Partner
VIT and Correia LTDA

Action
Development of the App Auto Security Vehicle system under a cooperation framework in R&D&I.

Objective
The project aims to develop the system known as App Auto Security Vehicle.
This initiative is part of the scope of research, development, and innovation (R&D&I), aiming at the creation of a technological solution focused on vehicle security.

Project Status

EXECUTED

Industrial Simulation Laboratory Setup

Partner
CONECTHUS – Institute of Technology and Biotechnology of Amazonas

Action
Implementation and configuration of a specialized laboratory for the simulation of industrial processes, focused on creating controlled environments for testing, validation, and technological development.

Objective
This project aimed to establish an industrial simulation laboratory, ensuring suitable conditions for experimentation with production processes, development of new technologies, and technical training.
Activities ranged from infrastructure planning to equipment configuration, following strict technical and regulatory standards.
The participation of Evolução Institute sought to ensure efficiency, safety, and quality, contributing to innovation and competitiveness within the industrial sector.

Project Status

EXECUTED

Defect Prediction System for Motherboards and Peripherals

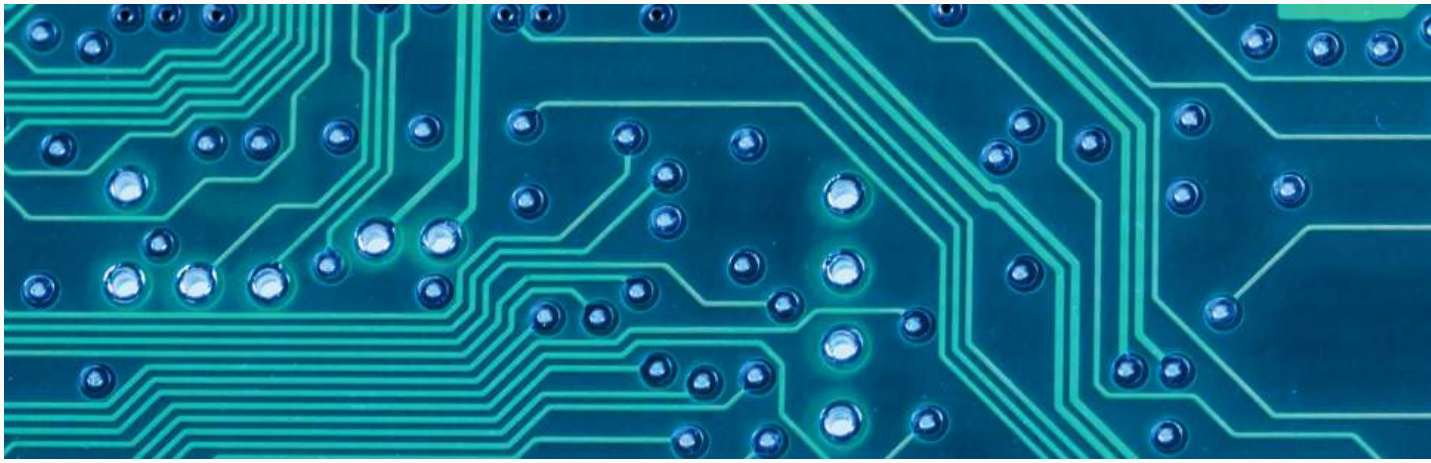
Partners
CITS.AMAZONAS and Digiboard

Action
Development of a predictive model for defect detection in boards and peripherals using Artificial Intelligence (AI), Business Intelligence (BI), and Big Data.

Objective
The project aims to develop a predictive model based on Business Intelligence, Big Data, Machine Learning, and Artificial Intelligence algorithms, using Digiboard's historical data.
The proposal seeks to optimize the production process, improve component quality, and support decision-making through data-driven insights.

Project Status

IN EXECUTION



Detran Project – Business Intelligence

Objective

The use of Business Intelligence (BI), Big Data, and Artificial Intelligence (AI) can play a crucial role in increasing the revenue of the State Department of Transit, providing a clearer understanding of data and optimizing processes.

Therefore, the objective of this project is to apply these technologies to analyze traffic and fine-related data, detect fraud, optimize inspection routes, and improve the overall operational efficiency of the organization.

Project Status

TO BE EXECUTED

Universal Recloser Control Project

Objective

Currently, the Energisa Group operates 7,912 reclosers distributed across 10 states, which creates logistical challenges that affect proper system performance.

Thus, this project proposes the development of an interoperable protection relay device, compatible with approximately 90% of the reclosers currently in the field. The equipment will feature multiple input types, signal converters, automation protocols, and a standard communication interface, ensuring enhanced usability and improved service performance within the Energisa Group.

Project Status

TO BE EXECUTED

Social Energy Cut Project

Objective

The Social Energy Cut Project aims to improve the relationship between the energy distribution company and recurrent delinquent customers, generating commercial benefits such as reducing default rates, increasing revenue, and mitigating non-technical losses.

Instead of suspending the customer's energy supply, the proposal seeks to restrict delivery power until the outstanding debt is paid — serving as a socially responsible collection tool.
The customer's consumption history will be analyzed using data transmitted by the smart meter, allowing the definition of a maximum usable power limit that ensures energy supply for essential needs only.

In addition, an automated and integrated communication channel will be established between the utility and the customer through Gisa, Energisa's virtual assistant, to encourage overdue bill settlements in a humanized and efficient manner.

Project Status

TO BE EXECUTED

Technological Automation of Services Project – CAERD

Objective

The proposed project aims to automate and optimize the processes of data collection, processing, and analysis within the Water and Sewage Company of Rondônia (CAERD).

In addition, it provides for the maintenance and continuous monitoring of technological activities and demands, as well as the development of studies, modeling, prototyping, and implementation of new monitoring and data collection technologies.

Project Status

TO BE EXECUTED

Lobomycosis Project

Objective

The Lobomycosis and Dermatophyte Fungi Project seeks to establish a research group focused on the development of nanopharmaceuticals and experimental studies aimed at identifying plant-based products (extracts and natural oils) with antifungal properties.

This is a pioneering research initiative related to the disease, designed to develop therapeutic alternatives based on innovative Nanobiotechnology techniques.
A holistic review of the scientific literature reveals the absence of comprehensive studies of this nature conducted either in Brazil or abroad—especially those proposing the use of Amazonian plant species for the synthesis of pharmaceuticals with medicinal applications in the treatment of fungal diseases, particularly Lobomycosis (Jorge Lobo's Disease).

Project Status

TO BE EXECUTED

2025

PORTFOLIO

SOCIAL

Evolução
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Manicure and Pedicure Project

Partner
IFRO – Ji-Paraná

Action
Professional training course “Manicure and Pedicure” – 80 hours.

Objective
Provide professional qualification courses in manicure and pedicure for people in situations of vulnerability and/or extreme poverty.
The course offers participants opportunities for entry into the labor market and entrepreneurship, given the broad range of opportunities available in commercial establishments and self-employment.

Project Status

EXECUTED

Good Manufacturing Practices Project

Partner
Campilar Alimentos

Action
Training and qualification program on Good Manufacturing Practices (GMP), including Standard Operating Procedures (SOPs), personal hygiene, workplace and food hygiene, training on Foodborne Diseases (FBDs), industrial kitchen hazards, waste reduction practices, and food microbiology.

Objective
Train Campilar Alimentos employees on the Technical Regulation of Standardized Operating Procedures applied to food production and processing establishments, as well as the Good Manufacturing Practices (GMP) checklist for such facilities.
This project supports the development of resilient infrastructure, the promotion of inclusive and sustainable industrialization, and the encouragement of innovation in alignment with Sustainable Development Goal (SDG) 9.

Project Status

EXECUTED

Accessible Garden Project

Action
Accessible Garden – Horticultural Therapy for People with Disabilities.

Objective
The Accessible Garden Project was developed to provide garden plots for individuals with reduced mobility or physical and mental disabilities, either independently or through associations and collective entities active in this field.

The garden was designed in compliance with legal accessibility standards, serving as an innovative, pioneering, and replicable model aimed at addressing the significant lack of adapted horticultural spaces.
It enables people with disabilities to engage in urban agriculture, leisure, or therapeutic activities in an environment specifically adapted for such purposes.

Project Status

TO BE EXECUTED

Solidarity Kitchen Project

Action
Solidarity Kitchen: Love in Every Dish.

Objective
Provide meals to socially and economically vulnerable populations residing in the Novo Ji-Paraná neighborhood, located in the Municipality of Ji-Paraná, State of Rondônia.

The initiative aims to ensure food security, promote social inclusion, and strengthen community bonds through collaborative and compassionate action.

Project Status

IN EXECUTION

Okami–Wolf–Pack–Family Project

Action
OKAMI–WOLF–PACK–FAMILY

Objective
The OKAMI Project is an initiative for social inclusion aimed at children, adolescents, youth, and adults enrolled in elementary and high school.
Its objective is to create opportunities for children and adolescents to develop an interest in sports activities, specifically Karate, combined with educational development.

The project promotes both physical and pedagogical growth, contributing to the reduction of school dropout rates and the improvement of students' discipline, focus, and social interaction.

Project Status

IN EXECUTION

Industrial Clothing Sewing Project

Action
Professional Training Course – Industrial Clothing Sewing.

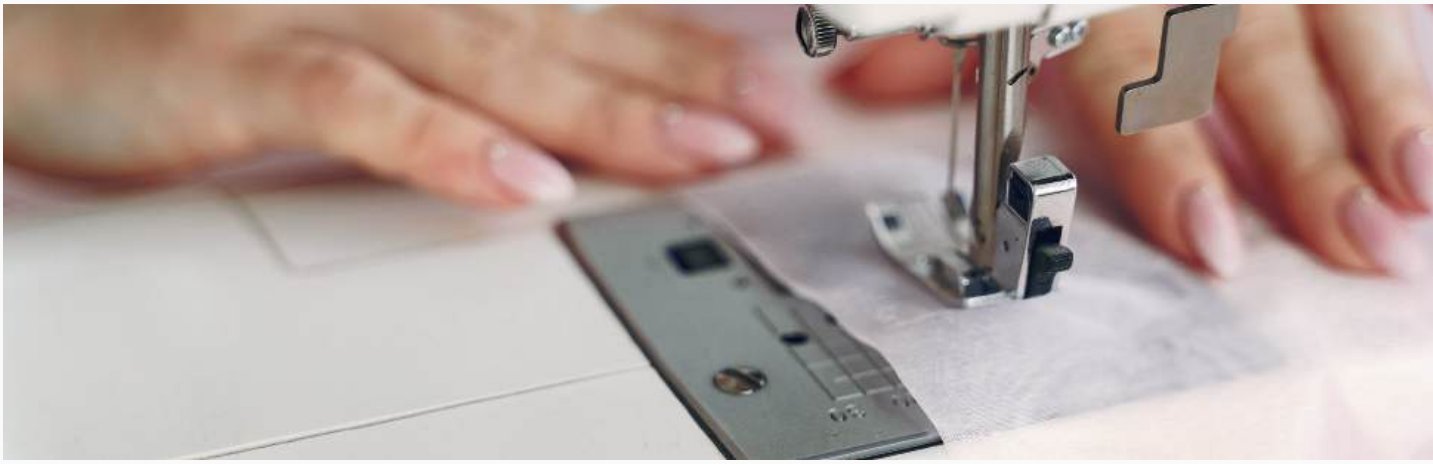
Objective
The Industrial Clothing Sewing Course is designed to train workers for the garment and textile industry, specifically in the sewing and assembly of clothing pieces.
It aims to qualify both those already employed in the sector and individuals seeking better job opportunities or entering the workforce for the first time.

The course develops essential competencies such as:
- Understanding manufacturing processes to facilitate garment assembly;
- Operating industrial sewing machines safely and efficiently;
- Acting in compliance with workplace safety, quality, productivity, and hygiene standards.

Through this initiative, the project contributes to professional qualification, social inclusion, and the strengthening of the local textile industry.

Project Status

TO BE EXECUTED



Freedom Literally Project

Action
Freedom Literally

Objective
Promote personal growth, self-esteem, awareness, and emotional well-being through reading for women serving sentences at the Agenor Martins de Carvalho Female Prison in Ji-Paraná, Rondônia.

This project enables incarcerated women to become aware of their rights, including access to justice and other fundamental rights.
The program “Freedom Literally” involves the reading of twelve literary works over twelve months. Each participant receives a book and takes part in monthly group meetings to share reading experiences and personal reflections.

These meetings are considered essential moments, as they offer women a space to be heard, while facilitators can share experiences and positive perspectives on life, contributing to their mental and emotional health.

Project Status

TO BE EXECUTED

Accelerate CSOs Municipal Project

Action
Accelerate CSOs Municipal

Objective
Provide training, advisory, consultancy, and capacity-building services for Civil Society Organizations (CSOs) through workshops and courses on project design and work plan development.

The initiative includes:
- Specialized materials for project elaboration;
- Workshops on the Regulatory Framework for Civil Society Organizations (MROSC);
- Identification and classification of social assistance projects related to children, adolescents, youth, adults, and the elderly;
- Training on organizational management and strategic planning for third-sector institutions.

The project aims to assess and strengthen the administrative and operational needs of third-sector organizations, promoting their sustainable development and long-term institutional resilience.

Project Status

EXECUTED

Low-Complexity Transportation Service Project

Action
Low-complexity transportation service for residents and individuals with physical limitations or comorbidities.

Objective
Provide low-complexity transportation services for bedridden individuals or those with physical limitations, offering safe and efficient mobility assistance for patients in socioeconomic vulnerability.

The service covers the transportation of patients to and from medical appointments, exams, and follow-ups, ensuring proper care within the low-complexity classification and according to each patient's physical condition and mobility needs.

Project Status

TO BE EXECUTED

Art in Motion Project

Action
Art in Motion

Objective
The Art in Motion Project (School of Arts) aims to promote human development and provide comprehensive social assistance to families living in situations of vulnerability and social risk, regardless of color, gender, social condition, or religious or political belief.

The project serves children aged 7 to 17 years, offering socio-educational activities through the arts, including artistic training and professional qualification.
Its main goal is to develop artistic skills, encourage creativity, and enable social inclusion through art, while also preparing participants for future professional opportunities within the creative sector.

Project Status

TO BE EXECUTED

Breastfeeding Pillow Production Project

Action
Production of Breastfeeding Pillows.

Objective
The Breastfeeding Pillow Production Project promotes sustainable textile reuse, creating breastfeeding pillows from leftover fabric materials.
These pillows are distributed after breastfeeding counseling sessions held at Primary Healthcare Units and hospitals.

The initiative aims to provide practical resources and information that contribute to the physical comfort and humanized care of mothers during the breastfeeding process.
By combining sustainability and maternal care, the project strengthens public health promotion and supports environmentally responsible practices.

Project Status

TO BE EXECUTED

Golden Pacifier Project

Action
Golden Breast Project – Provide breastfeeding counseling and newborn care services to women in situations of socioeconomic vulnerability in the municipality of Ji-Paraná.

Objective
Offer breastfeeding counseling to women in vulnerable socioeconomic situations during pregnancy and the postpartum period in the city of Ji-Paraná.

The project seeks to clarify doubts and provide guidance through educational activities covering breastfeeding and newborn care.
It promotes optimal conditions for maternal and child health, strengthening the bond between mother and child through individualized counseling based on protocols validated by the Ministry of Health and scientific communities.

Project Status

EXECUTED

ICT as a Teaching and Learning Tool Project

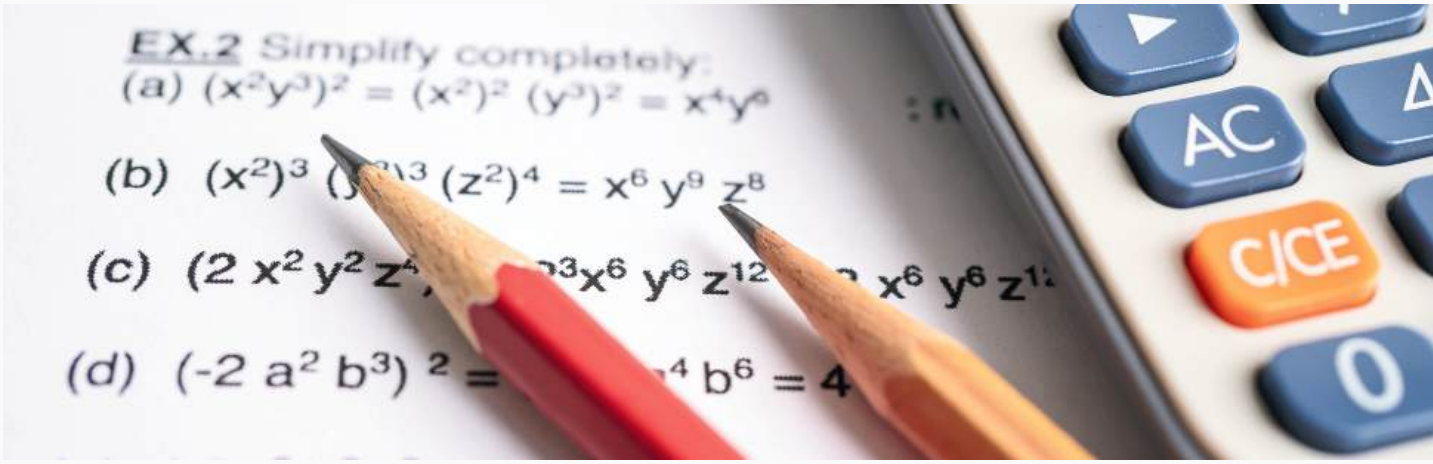
Action
Use of Information and Communication Technologies (ICT) as a teaching and learning tool for mathematics training in the Agricultural Family School of Rondônia (EFA).

Objective
Develop new teaching methodologies based on the alternation model adopted by EFA, integrating technical course activities with mathematics instruction through the application of ICT resources and educational games.

The project promotes innovative pedagogical approaches, fostering greater student engagement and contextualized learning by aligning technical education with digital literacy and interactive methodologies.

Project Status

TO BE EXECUTED



Producers' Market Project

Action
Producers' Market – Technical recommendations for the implementation and maintenance of good practices in small-producer markets.

Objective
Assist family farmers and small-scale producers who supply agricultural products to open-air markets, grocery stores, and retail outlets, ensuring the adoption of strict hygiene and safety standards to prevent food contamination (including measures against COVID-19).

The project also provides guidance on compliance with legislation and sanitary regulations, ensuring that the food supply service operates safely and responsibly. By promoting training and awareness, the initiative strengthens the local food supply chain, improving quality, safety, and consumer confidence.

Project Status

TO BE EXECUTED

Beautiful Hair Braiding Course

Action
Professional training course designed to teach hairstyling techniques for professional purposes.

Objective
Offer training in hairstyling techniques to people in situations of vulnerability and/or extreme poverty, enabling them to develop skills in:

- Creating braids, buns, ponytails, and event hairstyles (for parties and weddings);
- Preparing hair using brushing and styling techniques (including the use of curling irons and related tools).

The course aims to promote professional qualification, expand employment opportunities, and encourage entrepreneurial initiatives within the beauty sector.

Project Status

TO BE EXECUTED

Threads, Encounters, and Points Course

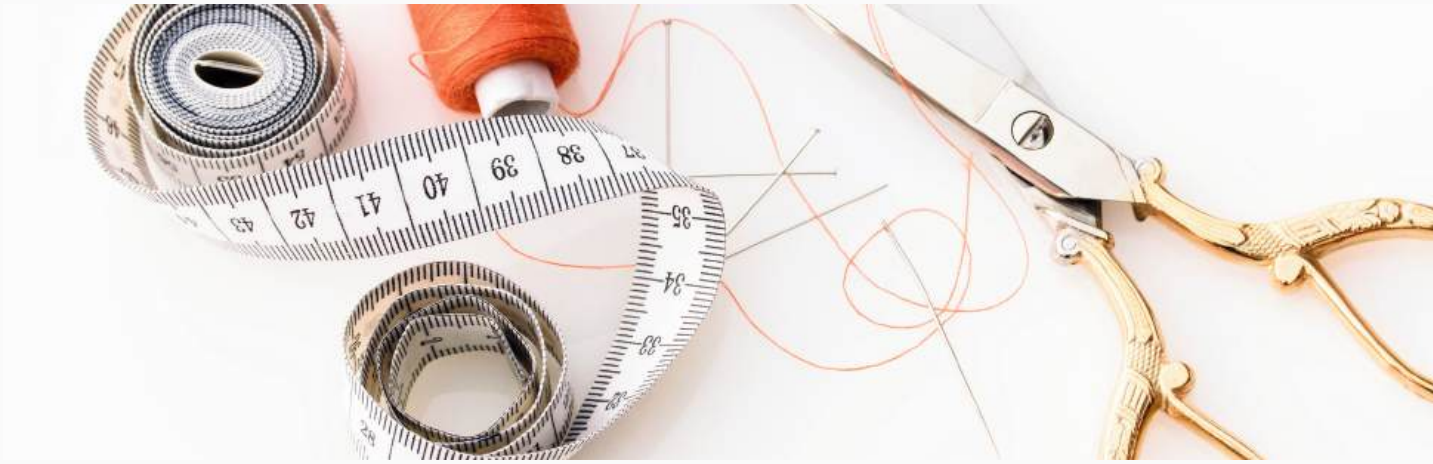
Action
Professional training course – Threads, Encounters, and Points: professional qualification for the elderly.

Objective
Offer professional qualification for elderly individuals, teaching them how to design, cut, sew, and assemble complete clothing pieces, as well as perform garment repairs.

The project recognizes the importance of active engagement for older adults, providing meaningful activities that foster a sense of purpose, usefulness, and happiness.
Even for seniors with stable financial conditions, maintaining participation in creative and social activities promotes well-being, mental health, and emotional balance.

Project Status

EXECUTED



The Sport Among the Karo Arara Project

Action
The Sport Among the Karo Arara: from initiation to competitive sports practice.

Objective
Provide structured sports practice in three Karo Arara villages — Iterap, Paygap, and Cinco Irmãos — offering activities such as soccer, volleyball, and athletics for children and adolescents.

The project aims to strengthen community sports initiatives and promote collaborative development through the participation of local sports leaders.
By combining cultural identity, teamwork, and physical education, the initiative contributes to the well-being and social cohesion of the indigenous communities involved.

Project Status

TO BE EXECUTED

Basic Industrial Mechanics Professional Qualification Course

Action
Professional qualification course in Basic Industrial Mechanics.

Objective
Provide initial training for professionals in the field of industrial mechanics, preparing them to meet the constant demands and changes of the modern industrial environment.

The course aims to develop qualified and competent professionals capable of working collaboratively, generating updated and innovative knowledge, and applying scientific and technological advances to practical situations.
It emphasizes creativity, operational efficiency, environmental awareness, and a strong commitment to life and sustainability.

Project Status

TO BE EXECUTED

Garra Project

Action
Evangelization in prisons and support for families of incarcerated individuals.

Objective
The Garra Project is the result of dedicated and committed work, established as a reference in spiritual, social, and emotional support for incarcerated individuals and their families.

With a growing demand, the project stands out for its positive impact on the communities it serves, promoting evangelization, rehabilitation, and hope among inmates.
Its activities include detailed social assessments and the assistance of vulnerable groups, such as homeless individuals, travelers in transit, and those serving sentences — always in accordance with judicial guidelines and requests.

The Garra Project not only provides spiritual and material comfort but also reinforces the Evolução Institute's commitment to social transformation and the care of vulnerable populations.

Project Status

IN EXECUTION

Beauty Entrepreneurs Project

Action
Training program in eyelash extension (lash) and eyebrow design.

Objective
Provide professional qualification courses for women in situations of vulnerability and/or extreme poverty, preparing them for active participation in the labor market and for the exercise of citizenship through the development of entrepreneurial skills, critical thinking, and self-confidence.

The project aims to empower women to achieve economic independence, enhance self-esteem, and foster social inclusion, contributing to the reduction of inequality and the promotion of dignified employment.

Project Status

EXECUTED

Flavors of the Land Project

Action
Flavors of the Land Culinary Workshop: Rediscovering Our Roots – Gavião Ethnic Group of the Municipality.

Objective
Conduct a gastronomic workshop in the Ikolen Gavião Village, located in the Igarapé Lourdes Indigenous Territory, to guide participants in the handling, preparation, and commercialization of native ingredients from the Gavião culture.

The project seeks to preserve and promote the cultural heritage of the Gavião Indigenous Community, emphasizing the value of Amazonian native ingredients while encouraging sustainable practices in the use and conservation of natural resources.

Through culinary education, the initiative fosters cultural identity, economic empowerment, and environmental awareness among indigenous participants.

Project Status

TO BE EXECUTED

Active Life: Digital Inclusion for the Elderly

Action
Promote active aging through digital inclusion.

Objective
Encourage active aging by enabling elderly individuals to become familiar with digital tools, allowing them to interact and stay connected independently with family, friends, and essential services.

The project includes guidance on how to:
- Access and use online information;
- Perform banking transactions;
- Schedule medical appointments;
- Access social benefits and public services.

By fostering digital literacy and autonomy, the project enhances the quality of life, social participation, and well-being of older adults in the digital era.

Project Status

TO BE EXECUTED

Inclusive and Supportive BPC–LOAS Project

Action
Inclusive and Supportive BPC–LOAS in the Municipality of Ji-Paraná.

Objective
Provide individualized in-person and online assistance to low-income individuals in situations of social vulnerability who are entitled to receive the Continuous Cash Benefit (BPC–LOAS), including people with disabilities, in the municipality of Ji-Paraná.

The project ensures social inclusion, citizenship access, and public service support through specialized assistance and guidance, contributing to the guarantee of social rights and the improvement of beneficiaries' quality of life.

Project Status

IN EXECUTION

Food Safety is Everyone's Business Project

Partner
ACIJIP

Action
Food Safety is Everyone's Business.

Objective
Promote a culture of food safety among microentrepreneurs (MEIs) in the food sector of the municipality of Ji-Paraná, Rondônia, aiming to prevent foodborne illnesses caused by contaminated food.

The project emphasizes the implementation of good manufacturing practices as an effective way to ensure food quality, consumer safety, and compliance with sanitary regulations.
By raising awareness and providing technical training, the initiative contributes to the professionalization and competitiveness of small food businesses in the region.

Project Status

EXECUTED

CAEE and APAE Renovation Project

Action
Design and development of the Renovation Project for the Center for Specialized Educational Assistance (CAEE) and the Association of Parents and Friends of Exceptional Children (APAE) in Ji-Paraná.

Objective
Committed to promoting inclusion and ensuring better learning conditions, this project was developed with a careful technical approach, focusing on accessibility, safety, and functionality of educational spaces.

The proposal includes the modernization of existing infrastructure, featuring the adaptation of five classrooms, two accessible restrooms, and circulation areas to improve internal mobility.
The initiative seeks to create welcoming, accessible, and efficient environments, tailored to the specific needs of the assisted population, ensuring a more inclusive and humanized educational experience.

Project Status

EXECUTED

Evolução Institute

Evolução
INSTITUTO

About Evolução Institute

The **Evolução Institute of Science and Technology** is a non-profit association headquartered at Av. Marechal Rondon, No. 334, Centro District, ZIP Code 76.900-036, in the city of Ji-Paraná, State of Rondônia, Brazil. **It is accredited by CAPDA** – the Committee for Research and Development Activities in the Amazon – as an institution authorized to carry out activities in Research, Development, and Innovation (R&D&I).

Evolução Institute was established on **December 5, 2019**, by entrepreneurs **Liomar Carvalho**, **Luciane Porto**, and **Aline Kess**. It is the **first private research, development, and technological innovation institute** outside the state of Amazonas to be accredited by CAPDA and to receive funds from the Information Technology Law to complete its projects.

Its mission is to foster scientific research, development, and technological innovation, and to:

- Build partnerships and establish connections with individuals, institutions, and companies to promote scientific research, development, and technological innovation;

- Encourage investment by entities linked to the economy of Rondônia and beyond, both nationally and internationally, as provided by law. The Institute offers services of a scientific and technological nature, developing and enhancing technological research throughout Brazil, with a focus primarily on the areas of **Information Technology, Engineering, Communication, and Bioeconomy**.

About Evolução Institute

- Support emerging technology-based companies and other entities focused on the development and advancement of technological research in general;
- Promote exchange with scientific, educational, and social development institutions, both national and international, as well as the development of studies and research, alternative technologies, and the dissemination of technical and scientific knowledge and information;
- Encourage actions that contribute to the preservation of ecological and social heritage in Rondônia and throughout the national territory, enabling research in technological and cultural innovation in the fields of biotechnology and pharmaceuticals;
- Promote environmental preservation, protection, and conservation through research, as well as foster sustainable development;
- Collaborate in and implement environmental education programs, protection and preservation of the Environment and Life, especially in natural and hydrological ecosystems and for endangered species of fauna and flora;
- Develop training programs through research focused on ESG practices (Environmental, Social, and Governance), seeking ways to minimize environmental impact.

Partners


PREFEITURA DE
Ji-Paraná


RONDÔNIA
Governo do Estado


SEDEC
RO
GOV


SEBRAE


SEMASF
Secretaria Municipal de
Assistência Social e Família


INSTITUTO FEDERAL
Rondônia


ACIJIP
Associação Comercial e Industrial de Ji-Paraná


CARVALHO
& PORTO
ASSESSORIA CONTÁBIL


HT MICRON
semicondutores


DIGIBOARD


nansen


ELGIN


energisa


GRUPO
equatorial


Sagemcom


CRESOL


WASION
AMÉRICA


VITASAL


ARGO


TRIBUNAL DE JUSTIÇA
DO ESTADO DE RONDÔNIA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RICAL


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NEOENERGIA


enel


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Nordeste S.A.


NOKIA


CLIMATEMPO


DATACOM


SULGIPE


Celesc


CONSTANTA


alliage


FIMCA
CENTRO UNIVERSITÁRIO


W3SAT


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UNIVERSIDADE FEDERAL
DE RONDÔNIA


HUAWEI

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Ethics Committee Member

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Ethics Committee Member

Location

Marechal Rondon, No. 334
Centro, Ji-Paraná/RO
ZIP Code: 76900-036

Contact

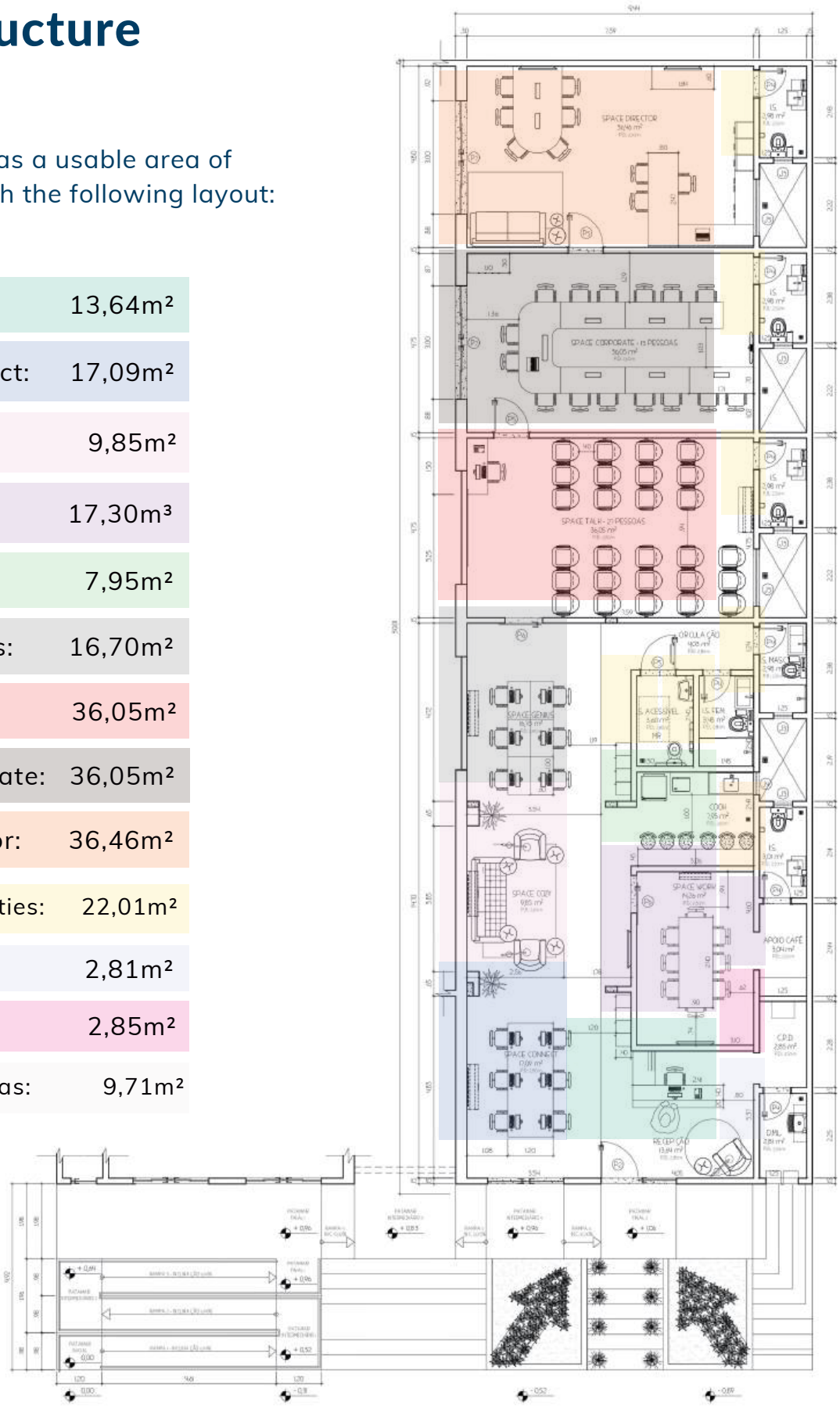
+55 (69) 3423-4992
+55 (69) 9 9275-5316
contato@evolucaoinstituto.org.br
www.evolucaoinstituto.org.br

Infrastructure

Dimensions:

The building has a usable area of 228.30 m², with the following layout:

Reception:	13,64m²
Space Connect:	17,09m²
Space Cozy:	9,85m²
Space Work:	17,30m³
Cook:	7,95m²
Space Genius:	16,70m²
Space Talk:	36,05m²
Space Corporate:	36,05m²
Space Director:	36,46m²
Sanitary Facilities:	22,01m²
D.M.L:	2,81m²
C.P.D.:	2,85m²
Circulation Areas:	9,71m²



Infrastructure

Organization:

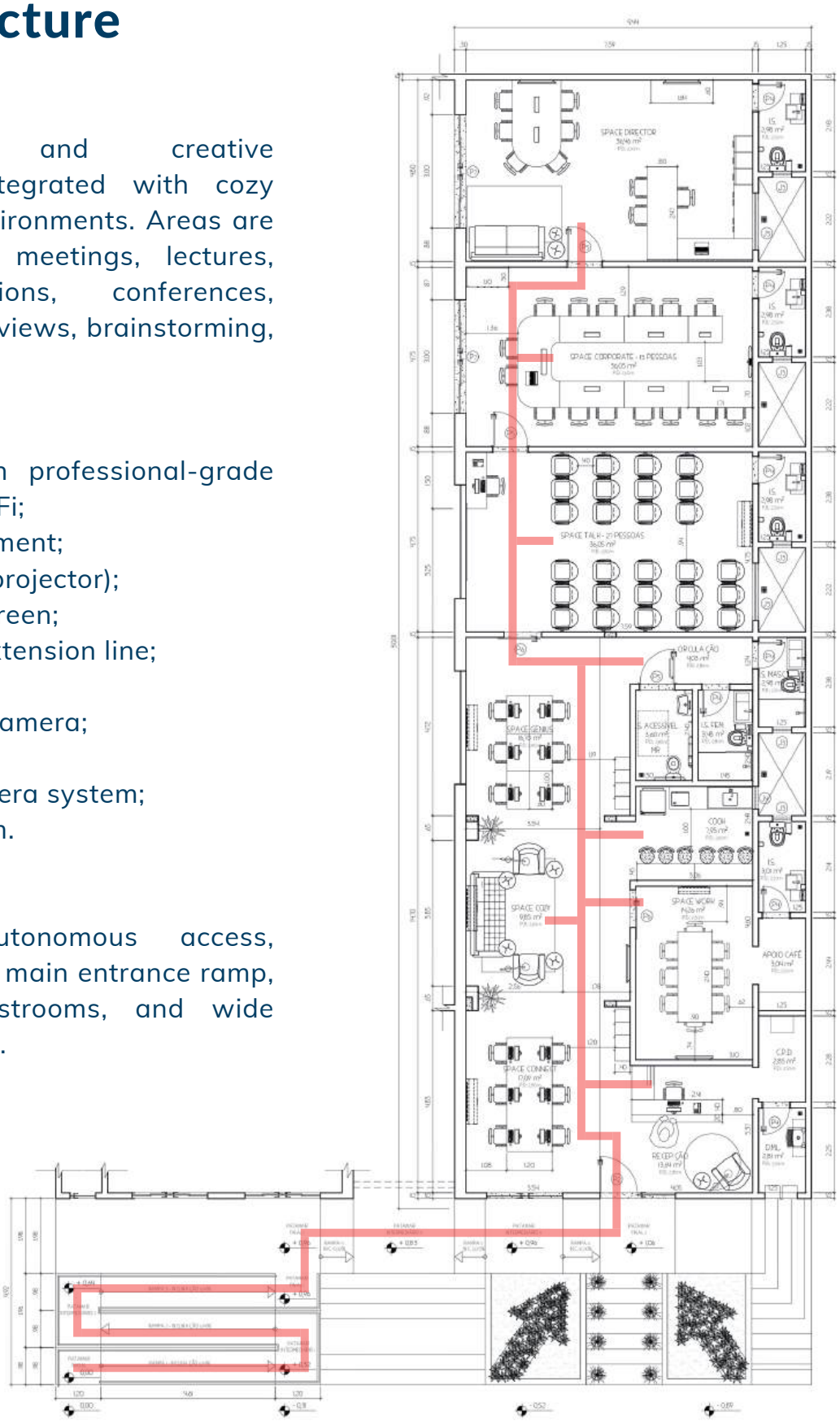
Collaborative and creative workspaces, integrated with cozy and modern environments. Areas are designated for meetings, lectures, training sessions, conferences, recordings, interviews, brainstorming, and more.

Technologies:

- Internet with professional-grade security, Wi-Fi;
- Sound equipment;
- Data show (projector);
- Projection screen;
- Telephone extension line;
- Smart TV;
- Conference camera;
- Microphones;
- Security camera system;
- Alarm system.

Accessibility:

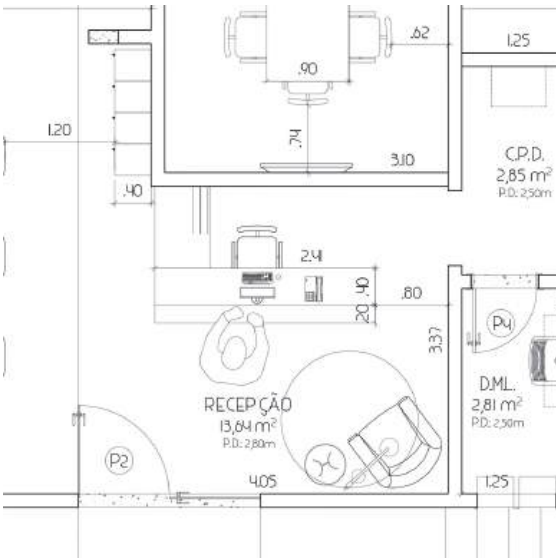
Safe and autonomous access, equipped with a main entrance ramp, male/female restrooms, and wide circulation areas.



Reception

Equipped with an accessible service counter and a waiting armchair.

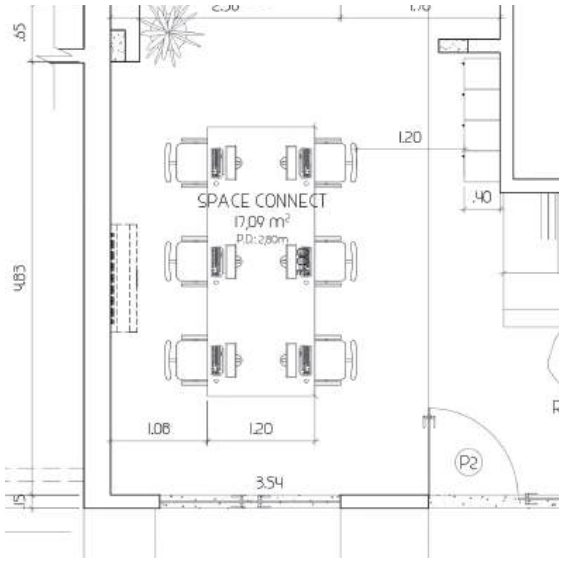
Service hours:
From 8:00 AM to 12:00 PM and from 2:00 PM to 6:00 PM, Monday through Friday.



Space Connect

Spacious table for 6 people, ergonomic chairs, telephone extension, wired internet, Wi-Fi, water, coffee, and shared kitchenette.

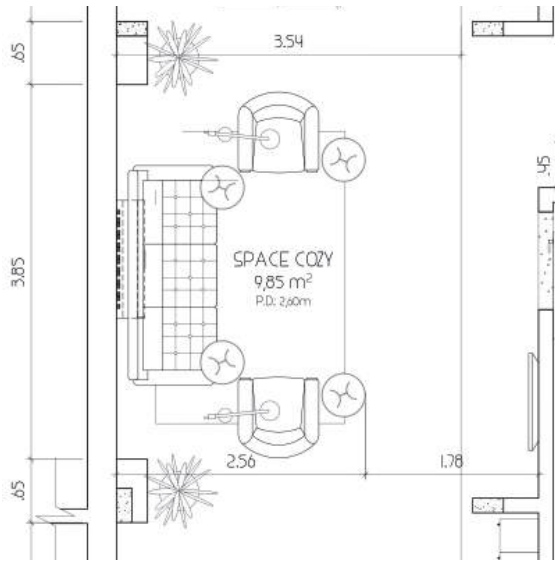
A collaborative workspace designed for interaction and successful networking.



Space Cozy

Space with a sofa, armchairs, and side tables.

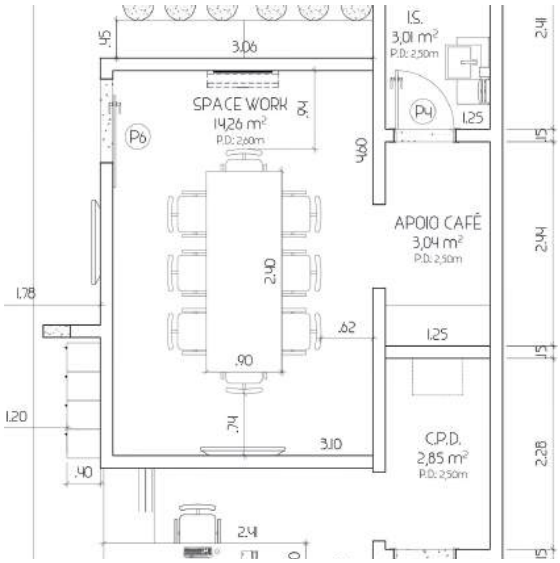
A cozy environment for informal, practical, and quick conversations.



Space Work

Equipped with an 8-seat table, ergonomic chairs, telephone extension, wired internet, Wi-Fi, smart TV, conference camera, sound mixer, microphones, whiteboard, private restroom, and a small internal pantry with water and coffee.

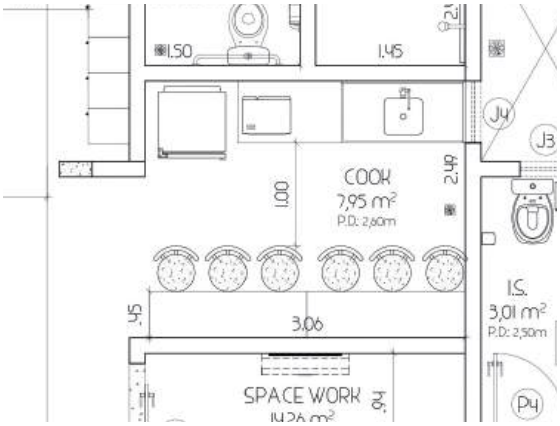
Ideal for board meetings, conferences, interviews, training sessions, private classes, video lesson recordings, group work, brainstorming, scrum master sessions, study, reading, team dynamics, courses, and more.



Cook

Space with a dining counter and bar stools, countertop with sink, water purifier, microwave, coffee maker, refrigerator, and utensils.

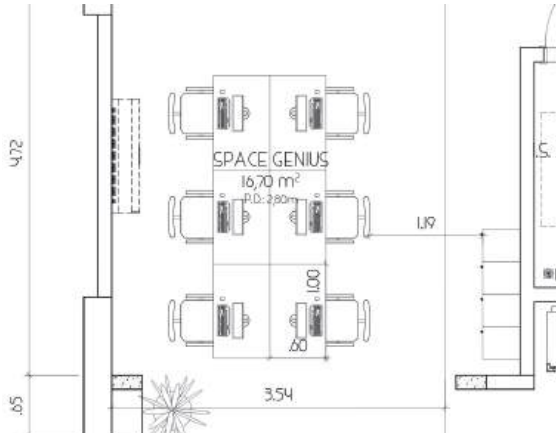
An integrated environment, perfect for coffee breaks and networking moments.



Space Genius

Large table for 6 people, ergonomic chairs, telephone extension, wired internet, Wi-Fi, water, coffee, and a shared kitchenette.

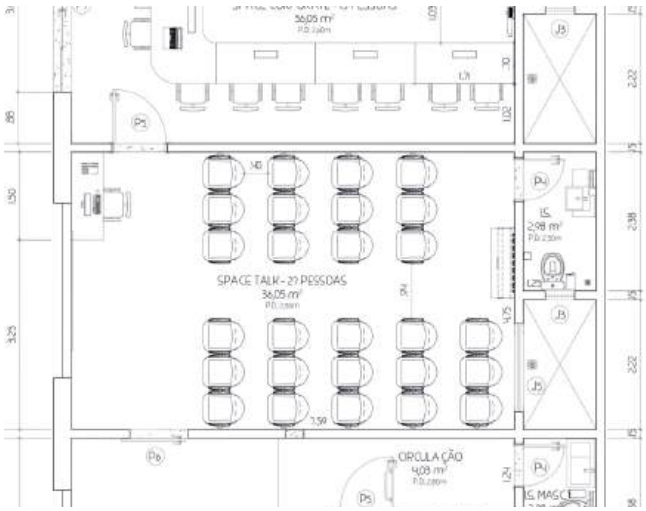
Integrated workspace with individual stations separated by partitions.



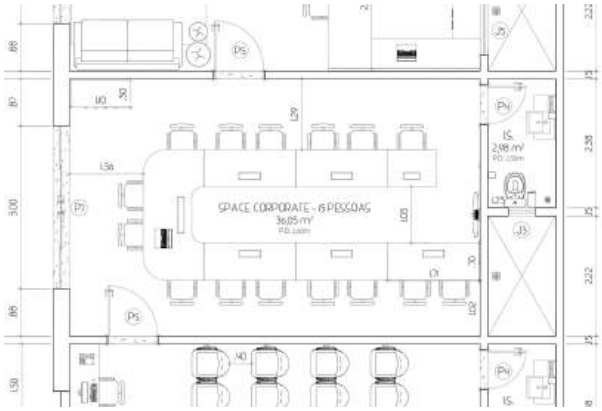
Space Talk

Equipped with wired internet, Wi-Fi, sound system, projector, projection screen, whiteboard, water, and private restroom.

Mini auditorium designed for corporate training, freelance professionals, business meetings, study groups, team-building activities, lectures, courses, and more, with a capacity of up to 30 people.



Space Corporate

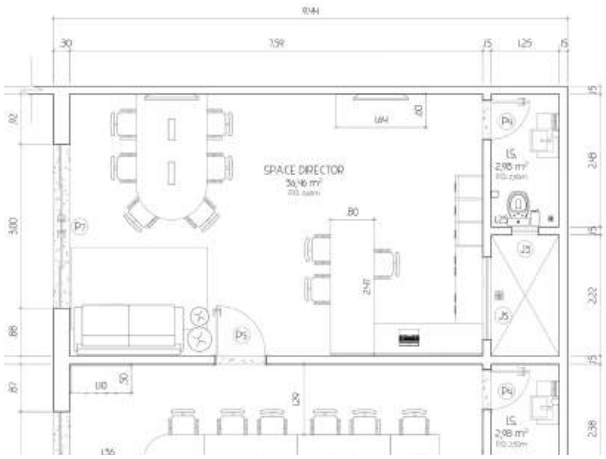


Equipped with wired internet, Wi-Fi, videoconferencing equipment, projector, projection screen, whiteboard, refreshment station with water/coffee, and a private restroom.

Ideal for board meetings, conferences, interviews, training sessions, private classes, video lesson recordings, group work, brainstorming, scrum master sessions, study, reading, team-building activities, courses, and more.

Space Director

Equipped with wired internet, Wi-Fi, meeting table, refreshment station with water/coffee, an area for informal conversations, and a private restroom.



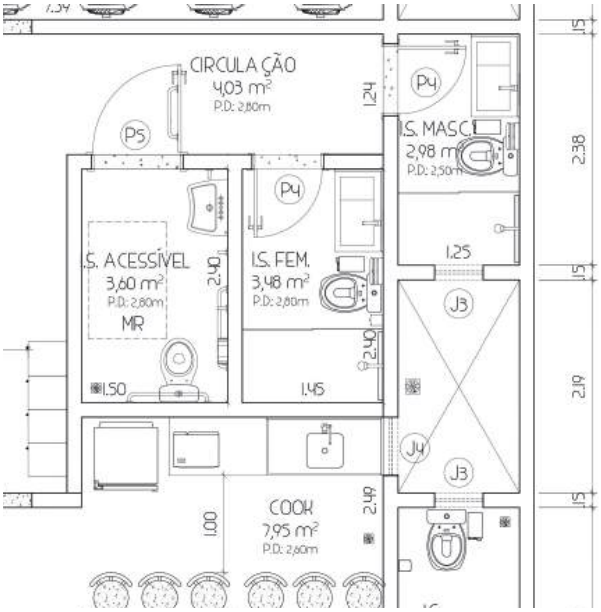
Responsible for directing, planning, organizing, and controlling the activities of various departments within the organization, establishing management policies for financial and administrative resources, structuring, streamlining, and other services.

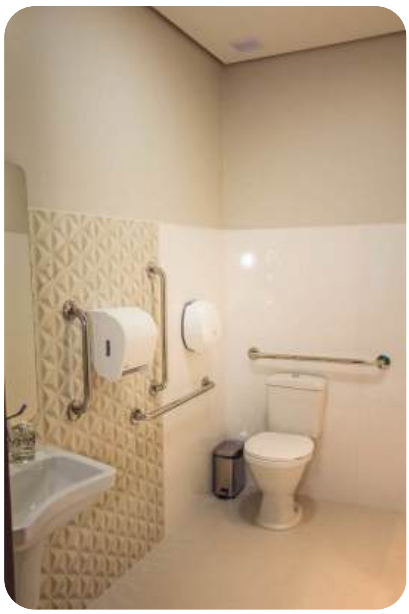
Restrooms

Accessible (female/male): sanitary fixtures, fittings, and support bars in accordance with NBR9050 standards;

Female: granite countertop, sanitary fixture, and shower;

Male: granite countertop, sanitary fixture, and shower.





Contact

Come visit us or get in touch with our team. We are ready to put your ideas into practice and present you with a professional, modern, and dynamic environment — the perfect place for you to **EVOLVE**.

Address
Avenida Marechal Rondon, No. 334
Centro, Ji-Paraná/RO
ZIP Code: 76900-036

Our Phone Numbers
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www.evolucaoinstituto.org.br