

Luan Lins

+55 87 981486931 luancsl95@gmail.com [linkedin.com/luan-lins-b5960570](https://www.linkedin.com/luan-lins-b5960570) github.com/luancsl

luanlins.dev.br

Experience

-
- Laboratório de Computação Embarcada e Tecnologias Industriais (LACETI-CIN)** Nov 2022 – Present
Tech Lead - DevOps Developer Recife, PE
- Implemented IoT data lake (76k devices) with MQTT, Kafka, Spark; integrated ML/analytics; managed with Terraform; real-time/batch processing; scalable.
 - Built a CI/CD pipeline using CircleCI and ArgoCD, reducing deployment time and ensuring consistent releases.
 - Led a cross-functional team of 6 in implementing a second version of a manufacturing line execution system (MES) utilizing React and Node.js, resulting in a 25% performance increase.
- Laboratório de Computação Embarcada e Tecnologias Industriais (LACETI-CIN)** Jun 2021 – Nov 2022
Software Engineer - Fullstack Developer Recife, PE
- Developed MES system for battery production line using React, GraphQL and Node.js. Created responsive interfaces, implemented GraphQL APIs and services, and integrated real-time production data.
 - Established automated testing for front-end applications, achieving 90% coverage. Using Cypress for end-to-end testing and Jest for unit testing, he established a suite that ensured the functional integrity of the application.
 - Optimization of data synchronization between production line sensors and cloud using a caching solution with Redis and Node.js. The solution reduced latency in data transmission and improved synchronization reliability.
- Laboratório Multidisciplinar de Tecnologias Sociais (LMTS)** May 2019 – Jun 2021
Software Engineer - Fullstack Developer Garanhuns, PE
- Designed 'VacinaGaranhuns', a React/Google Maps system to manage COVID-19 vaccination. Included online scheduling, geolocation and home vaccination, optimizing the campaign for 12,000 people.
 - Led the development of a smart irrigation system with React Native and Node.js, integrating meteorological APIs and IoT devices.
 - Uses advanced analytics for accurate evapotranspiration calculation, resulting in 62% reduction in water consumption for small farmers.

Education

-
- Universidade Federal de Pernambuco** Expected Oct 2024
Master's Degree in Computer Science Recife, PE
- Universidade Federal Rural de Pernambuco** Jul 2021
Bachelor's Degree in Computer Science Garanhuns, PE
- Relevant:** Monitor in the discipline of Operating Systems, Distributed Systems

Projects

-
- Smart Irrigation API (SIA)** | *Node.js, Express.js, MongoDB, Jest, Cheerio*
- Designed a RESTful API for integrating multiple climate data providers, using geographic coordinates as the main parameter.
 - Produced an efficient caching system, reducing API response time by 30% and improving fast access to regional climate data.
- Smart irrigation application (GrowApp)** | *React-Native, Google Maps, Jest, Watermelondb*
- Developed a mobile application in React Native with Google Maps to optimize agricultural irrigation. The system integrates real-time evapotranspiration calculations and IoT devices.
 - Built a LoRa mesh network for actuator devices in remote agricultural irrigation areas, significantly expanding the coverage and efficiency of field irrigation systems.
- TaxiCar Simulator** | *React, Google Maps, D3.js, Uber H3*
- Created a simulator to optimize driver-passenger matching utilizing complex geospatial algorithms.
 - Introduced and evaluated several matching methods, including the Hexagonal Hierarchical Geospatial Indexing System (Uber H3).

Technical Skills

Languages: JavaScript, TypeScript, Python, Java, C, C#

Technologies: React.js, React Native, Node.js, GraphQL, API RESTful, Docker, Kubernetes, AWS, Apache Spark, Kafka, Apache NiFi, PyTorch, MLflow, KServe.

Concepts: Agile Methodology, Scrum Methodology, Git, SOLID, Clean Code, TDD, CI/CD, Microservices, Observability, SQL, NoSQL, Database Normalization, Machine Learning, Cloud Computing, Virtual Machine.

Soft Skill: Leadership, Effective communication, Teamwork

Spoken Languages: Portuguese (Native), English (Intermediate).

Certifications

Build Basic Generative Adversarial Networks (GANs)

Jun 2021

U8RM8PPNTK4Y

Patents

Actuation Device for Smart Irrigation in ESP32 (GrowConnect)

Jul 2020

BR BR512020002154-9

Smart Irrigation API (SIA)

Jun 2020

BR BR512020001505-0

Smart irrigation application focused on evapotranspiration and climate (GrowApp)

May 2020

BR BR512020001504-2

Application for managing meteorological stations and calculating reference evapotranspiration (EvApp)

Feb 2020

BR BR512020001500-0

Publications

Stochastic Modeling for Assessing the Reliability and Availability of Drone-Based Surveillance Systems

Jun 2024

Luan Lins, Erick Nascimento, Jamilson Dantas, Jean Araujo, Paulo Maciel

Experimental Evaluation of Software Aging Effects in a Container-Based Virtualization Platform

Oct 2020

Felipe Oliveira, Jean Araujo, Rubens Matos, Luan Lins, André Rodrigues, Paulo Maciel