# Eriko Werbet

*Résumé*


Fortaleza, Ceara, Brazil
(85) 99612-9509
werbet@gmail.com
https://eriko.pro
https://www.linkedin.com/in/eriko


## SUMMARY


**Solutions Architect and Software Engineer fluent in both Brazilian Portuguese and English, with over 20 years of experience in software architecture design, technical pre-sales, and development of innovative solutions in IoT, Big Data, and Artificial Intelligence**. Technical leader with a track record of mentoring teams, leading strategic technology initiatives, and **contributing to the acquisition of more than R$50 million in his last role through technical proposals and public bids**. Currently pursuing an MBA in Data Science and Analytics, seeking to apply data analysis, machine learning, and generative AI to accelerate digital transformation and support data-driven strategic decisions.


## EXPERIENCE

2020 – 2024 (FT)

Instituto Atlântico
***Lead Solutions Architect***

In this position I served as Lead Solutions Architect for the institution and led a group of 6 architects. I worked supporting the Sales, Innovation, and Operations departments.

- Designed 96 technical solutions for prospective customers. Created and delivered over 100 technical presentations demonstrating the added value of these solutions to national and international customers.
- Developed technical proposals for customer projects, 33 public bids, and consulted for 5 startups in the institutional startup acceleration program; contributing to the acquisition of more than 50 million brazilian reais over 4 years.
- Helped structure the institutional solutions architect group (technical pre-sales group), where I led and mentored a team of 6 architects.
- Gathered technical and business requirements for 192 business opportunities and defined implementation plans for 96 projects, including their risks, assumptions, constraints, effort estimation, schedules, team composition, and required hardware and software.
- Contributed to institutional strategic planning, including the accreditation strategy with EMBRAPII (Brazilian Company for Industrial Research and Innovation).

2006 – 2019 (FT)

Instituto Atlântico
***Senior Software Engineer***

In this position I worked for 13 years as technical leader, software architect, and software engineer. I worked on projects for corporate customers from several company portfolios, and R&D projects funded by national and international research and innovation agencies.

## EDUCATION

2025 – 2026 **MBA in Data Science and Analytics**
DATA SCIENCE AND ARTIFICIAL INTELLIGENCE
CAPSTONE PROJECT IN GENERATIVE AI
*University of São Paulo*

2011 – 2015 **Doctor's in Applied Computer Science ***
INSTITUTO ATLÂNTICO SCHOLARSHIP
RESEARCH IN OPERATING SYSTEMS
*University of Fortaleza*

*ALL COURSEWORK COMPLETED, THESIS UNFINISHED

2005 – 2008 **Master's in Applied Computer Science**
STATE GOVERNMENT SCHOLARSHIP (FUNCAP)
DISSERTATION IN DATABASES
*University of Fortaleza*

1999 – 2004 **Bachelor's in Computer Science**
FEDERAL GOVERNMENT SCHOLARSHIP (CNPQ)
FINAL PROJECT IN DATABASES
*University of Fortaleza*

## AWARDS AND SCHOLARSHIPS

2011 **Doctoral Scholarship**
*Instituto Atlântico*

2005 **Master's Scholarship**
*FUNCAP (Ceará State Foundation for Scientific Research)*

2004 **Industrial and Technological Level I Federal Grant**
*CNPq (National Council for Scientific Development)*

2004 **Graduated with Honors**
*University of Fortaleza*

2000 **Scientific Initiation Scholarship**
*CNPq (National Council for Scientific Development)*

## HARD SKILLS

**Solutions Architecture**

**a)** Architectural patterns, reference architectures, design patterns, UML, and component integration. **b)** Cloud native design and cloud provider services. **c)** Database modeling, SQL, NoSQL, Big Data technologies, and data analysis platforms. **d)** AI and Machine Learning concepts, frameworks and applications. **e)** Development of corporate technical proposals and submission for public bids.

**Software Development**

**a)** Data structures and algorithms. **b)** Visual Studio Code, Python, Ruby, Java, JavaScript, and C/C++. **c)** Backend frameworks and technologies for APIs and services. **d)** Continuous Integration and Delivery (CI/CD), Git, Docker, development cycle automation. **e)** Cloud deployment (Amazon AWS). POSIX Operating Systems (Linux and Unix).

- Technically led 9 R&D projects with teams of up to 15 developers for corporate customers such as Hewlett-Packard (HP) Brazil and HP Palo Alto USA, Samsung, LG, and AOC; and public institutions like RNP (Brazilian Research and Education Network) and the European Union Commission.
- Implemented and delivered 12 software solutions; from C/C++ firmware for mobile devices, through TCP/IP network controllers in Java, backends for corporate Web applications in private clouds, to IoT (Internet of Things) platforms for healthcare applications.
- Replaced project managers on various occasions, managed backlogs, and provided support for ongoing tasks, keeping project schedule.
- Served as a technical reference at the institutional level, offering solutions and guiding problem-solving in projects from other institutional portfolios. Prospected technologies and implemented proofs of concept (PoC) for validation.
- Supported the Sales team in more than 200 technical proposals and public bids; from understanding the problem in customer meetings to solution design and estimating work effort and team size.

2011 – 2020 (PT)

University of Fortaleza
***Adjunct Professor***

Worked as a professor and advisor for undergraduate students in the following programs: Computer Science, Computer Engineering, Electrical Engineering, Electronics and Automation Engineering, as well as Systems Analysis and Development. Used a hands-on approach to teach the following classes: Databases 101, Databases Implementation, Operating Systems, Algorithms, Data Structures, Computer Programming (C/C++, Java and Python), and Mathematical Logic (Math and Prolog).

## RELEVANT PROJECTS

**1) "EMBRAPII Business Unit at Instituto Atlântico"**

I worked on the technical conception and contributed substantially to Instituto Atlântico's successful accreditation bid strategy as an EMBRAPII (Brazilian Company for Industrial Research and Innovation) unit focused on Data Science and Artificial Intelligence; establishing a new revenue channel.

- Conducted comprehensive research on existing EMBRAPII units and competitors, supporting the unique value proposition of the new unit.
- Developed the technical justification for the unit's expertise, using projects developed, and wrote most of the critical submission documents.
- Worked in the entire submission and defense process, culminating in the creation of the "Smart Manufacturing" EMBRAPII unit.
- Played a key role in the initial structuring of this new business unit and trained teams from several departments for its operations.

**Data Science and Artificial Intelligence**

**a)** Statistics, linear algebra, and calculus. **b)** Power BI, Python, pandas, numpy, scipy, scikit-learn, matplotlib/seaborn. **c)** Linear regression, probability distributions, sampling, and dimensionality reduction. **d)** Machine learning models such as logistic regression, Naive Bayes, decision trees, random forests, KNN, and K-means. **e)** Generative AI applications, LLMs and their APIs. Vibe coding, prompt engineering, and agentic AI.

## SOFT SKILLS

**Leadership**

Technically led a team of 6 solution architects, over 200 business initiatives, and 9 development projects with up to 15 professionals.

**Communication**

Fluent in English, gathered requirements from over 50 customers, designed features with national and international stakeholders, published papers, and defended projects before funding institutions in Brazil and abroad. Worked as a university professor for 10 years.

**Collaboration and Proactivity**

Proactively collaborated with Sales, Innovation, Operations, and Marketing departments. Provided technical consulting for projects across multiple portfolios and startups.

**Critical Thinking and Problem Solving**

Evaluated and reviewed 192 business initiatives, from RFPs to public bids. Implemented tools to increase my efficiency and that of the teams I worked with. Identified and fixed issues in projects, technical solutions, sales proposals, effort estimates, etc.

## PUBLICATIONS


Souza, J. T. de, Campos, G. A. L. de, Rocha, C. L., **Werbet, E.** et al (2020). An agent program in an IoT system to recommend activities to minimize childhood obesity problems. *Proceedings of the 35th ACM/SIGAPP Symposium on Applied Computing (SAC '20)*, 654-661. DOI: 10.1145/3341105.3373977.

Alves, L. V., Melo, R. T. de,**Araujo, E. W. de O.** et al (2020). An Agent Program in an IoT System to Recommend Plans of Activities to Minimize Childhood Obesity. *2020 IEEE 44th Annual Computers, Software, and Applications Conference (COMPSAC)*, 674-683. DOI: 10.1109/COMPSAC48688.2020.0-181.

Costa, L. F. da, **Araujo, E. W. de O.** et al (2020). Smart Algorithm for Unhealthy Behavior Detection in Health Parameters. *2020 IEEE 44th Annual Computers, Software, and Applications Conference (COMPSAC)*, 654-663.
DOI: 10.1109/COMPSAC48688.2020.0-183.

Triantafyllidis, A., **Werbet, E.** et al (2020). Computerized decision support and machine learning applications for the prevention and treatment of childhood obesity: A systematic review of the literature. *Artificial Intelligence in Medicine*, *104*, 101844. DOI: 10.1016/j.artmed.2020.101844

**2) "Big Data Platform Solution Design and Architecture for a Global Technology Corporation"**

Led the technical design and successful pre-sale of a R$17,000,000.00 Big Data platform for a global technology corporation in the consumer electronics market. This solution was designed to ingest, pre-process, and analyze datasets from various sources, such as industrial machinery, APIs, databases, sensors, and manufacturing software. My responsibilities included:

- Designed all technical aspects of the Big Data platform, including data ingestion pipelines, storage solutions, processing frameworks, and analytical components to provide insights to the manufacturing operations.
- Architected the entire solution to be deployed on AWS cloud infrastructure, leveraging scalable and cost-effective services.
- Estimated team size and identified all technical resources needed for project execution, including specialized hardware, software, and personnel.
- Successfully presented the technical solution in English to senior management and engineering teams located in Germany and the United States, securing project approval and its sale.

**3) "First SOFTEX PPI Project at Instituto Atlântico"**

SOFTEX and PPIs (Priority Programs and Projects of National Interest) are initiatives for fostering the ICT industry in Brazil, funded by the Ministry of Science, Technology, and Innovation (MCTI). I was responsible for conceiving and structuring technological training programs under the SOFTEX PPI. This project, Atlântico's first in this model, established a new channel for funding.

- Led the technical conception of the training program, including market research, teaching models, and target audience.
- Proposed and specified 6 programs, with 4 being ultimately approved (Data Science, Cognitive Computing, User Experience, and Full Stack Development), based on market, customer, and institutional needs.
- Structured the complete teaching content of the programs, split into beginner, intermediate, and advanced modules.
- Designed each program to have 3 phases (leveling, technological training, and residency) and implemented a hybrid online teaching methodology with skill-based projects.
- Defined performance KPIs and quantifiable metrics for the programs, aligned with the Brazilian Government goals.

## PROFESSIONAL REFERENCES

*Professional references available upon request.*

**4) "High-Performance Cloud-Based Thin-Client Virtualization for Hewlett-Packard (HP)"**

This project involved the design and architecture of a cloud-based Thin-Client solution for HP. The goal was to enable users to access powerful virtual workstations with GPUs securely and efficiently from their existing laptops and PCs, with a crucial focus on delivering low latency and high stability.

- Architected a cloud-based Thin-Client solution, meeting the need for scalable and secure access to high-performance virtual workstations, including GPUs.
- Designed a robust data streaming backbone using Apache Kafka to ensure efficient and scalable data flows, crucial for keeping low latency.
- Integrated advanced streaming and remote desktop protocols to deliver a responsive, immersive, and highly stable user experience for access from laptops and desktop PCs.
- Created the technical presentation and helped present it to key HP stakeholders in Boise, USA, demonstrating its technical viability and business value.

**5) "EU-Brazil H2020 OCARIoT Project: Advances in IoT, AI, and Personalized Health Interventions for Childhood Obesity"**

The OCARIoT project, an international initiative funded by the European Union and Brazil's RNP, aimed to combat childhood obesity through an innovative, technology-driven approach. It developed an IoT-based personalized coaching solution, using Data Science and AI to promote healthy eating habits and increase physical activity among children. It was an R&D effort involving a diverse consortium of 12 institutions from Europe and Brazil. My main contributions:

- Worked with various Brazilian and European institutions in the technical project conception before its approval, and contributed to resource estimation. Also wrote the documents that secured its funding for joint submission to both the European Union and Brazilian Government.
- Technically led and conducted reviews of generated artifacts. Implemented Proofs of Concept (PoC) to validate designed solutions and prospected technologies.
- Designed the solution architecture and assisted in implementing a scalable and open IoT platform, integrating various sensors for comprehensive health data collection (e.g., anthropometry, activity, sleep, diet, environmental factors).
- Contributed to the development of behavioral and health analysis algorithms. Including time series analysis algorithm and machine learning algorithms (Recommendation System) for diagnosis, prognosis, and personalized interventions for childhood obesity.
- Presented and defended project progress and technical innovations to high-level stakeholders from the European Union and Brazil in Madrid, Spain, and Brussels, Belgium.