PERSONAL INFORMATION

Rudimar Baesso Althof

⚲ Ricardo Landmann Street 963, Joinville -SC, Brazil

▢ +55 48 996035792

✉ rualthof@gmail.com

in linkedin.com/in/rudimar/

Gender Male | Date of birth 14 August 1993

WORK EXPERIENCE

Oct 2019 - Now

IoT Consultant

RBA CONECTIVIDADE, JOINVILLE -SC, BRAZIL
Consultant for companies willing to implement IoT solutions and companies already implementing and needing help at their implementation.

- Lavazza Pro UK: confidential (Oct 2019 - Now).

Jun 2019 to Set 2019

Researcher

SENAI INNOVATION INSTITUTES, JOINVILLE -SC, BRAZIL
Responsible for researching and implementing augmented reality (AR) solutions for remote robotic manipulation.

- Study of robotic applications using augmented reality.

- Development of software prototypes for robotic teleoperation in Unity.

- Image capture and streaming using OpenCV Python library.

Jun 2017 to Jun 2019	## IoT Specialist

TERMICA SOLUTIONS, JOINVILLE -SC, BRAZIL

- Worked developing and integrating Unix based C++ and Python scripts along with MySQL database and web applications developed in PHP, Javascript and HTML using the Codeigniter and Vue.js frameworks.

- Implementation of APIs for inserting and retrieving data from a MySQL database using the Python Flask framework.

- Developed from scratch a monitoring system for PLCs data, reading data from the protocols MODBUS and OPC-UA. It was programmed in C++ and later switched to Python, both using OOP and paralelism.

- Developed scripts for evaluating data and sending alerts via e-mail and SMS, as well as creating PDF reports.

- Programming of an industrial furnaces using the Phoenix Contact PLCs using Function Blocks and Structured Text languages, interfacing with multiple Modbus TCP devices.

- Managed the backend structure in the Microsoft Azure cloud, maintaining a virtual machine hosting the application.

- Participated in INNOTECH Korea 2018, representing Termica Solutions, having meetings with Korean companies, presenting the ReMo discussing possibilities of cooperation between companies.

- Participated in the ABII - Brazilian Association of Industrial Internet (https://www.abii.com.br) meetings in the testbeds group.

EDUCATION AND TRAINING

2018 - 2020	## Master's Degree

Federal University of Santa Catarina Joinville - SC, Brazil

PPGESE - Graduate Program in Electronic Systems Engineering

2011 - 2017	## Mechatronics Engineering

Federal University of Santa Catarina, Joinville - SC, Brazil

- Final Thesis: Use of the Unscented Transform method for uncertainties quantification and its comparison with the Monte Carlo method. Case study: simulation of electrical fault in network fed by wind generators.

- Exchange through the Sciences Without Borders program in the United States, participating in activities at three different universities:

  ∗ Columbia University: American Language Program (144h)
  ∗ University of Idaho: Electrical engineering student (2 semesters)
  ∗ University of Alabama: Summer internship (3 months)

- Academic Merit: Best student of the Mechatronics Engineering course among UFSC Joinville graduates in Aug 2017.

- Assisted professors on multiple courses, teaching students, helping on classes and labs. Technological Chemistry (2011), Geometric Modeling (2012) and Programming Course (2015).

2018 - Now	**Other Courses**
	Online courses to keep me updated

- Aug 2019: Systems Architecture Fundamentals (3h)
- Aug 2019: Agile projects with SCRUM (2h)
- Jul 2019: Internet and database development with Python and Django (4h)
- Oct 2018: Python Beyond the Basics - Object-Oriented Programming (5h)
- Aug 2018: Microsoft Power BI - Up and Running With Power BI Desktop (10h)

PERSONAL SKILLS

Languages	**Portuguese:** native | **English:** working proficiency | **German:** elementary
Tech skills	

- Programming: MATLAB, C, C++, Python, ZeroMQ
- Web: Apache, HTML, Javascript, PHP, Django, Flask, MySQL, Microsoft Azure
- Other: Windows, Unix, Power BI, Office Package, Electronics

ADDITIONAL INFORMATION

Publications	R. B. Althof ; M. FERBER . **Efficient Uncertainty Analysis of Wind Farms in the Time Domain using the Unscented Transform**. Em: 8th International Symposium on Power Electronics for Distributed Generation Systems, 2017, Florianópolis. 8th International Symposium on Power Electronics for Distributed Generation Systems, 2017.