Marcelo Aleksandravicius

Computer Systems Engineer and Researcher

+ 55 (21) 98707-8339

FOLKS

Marcelo dos Santos Aleksandravicius

Marital status	Married
Nationality	Brazilian
Naturalness	Rio de Janeiro - RJ

LANGUAGES

italian, english

CONTACT

Cell phone	+ 55 (21) 98707-8339
Residence	+ 55 (21) 2482-2484
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Skype	marcelo_aleks
Blog	marceloaleks.com

EXPERIENCE

Always developing Technology 20+ years

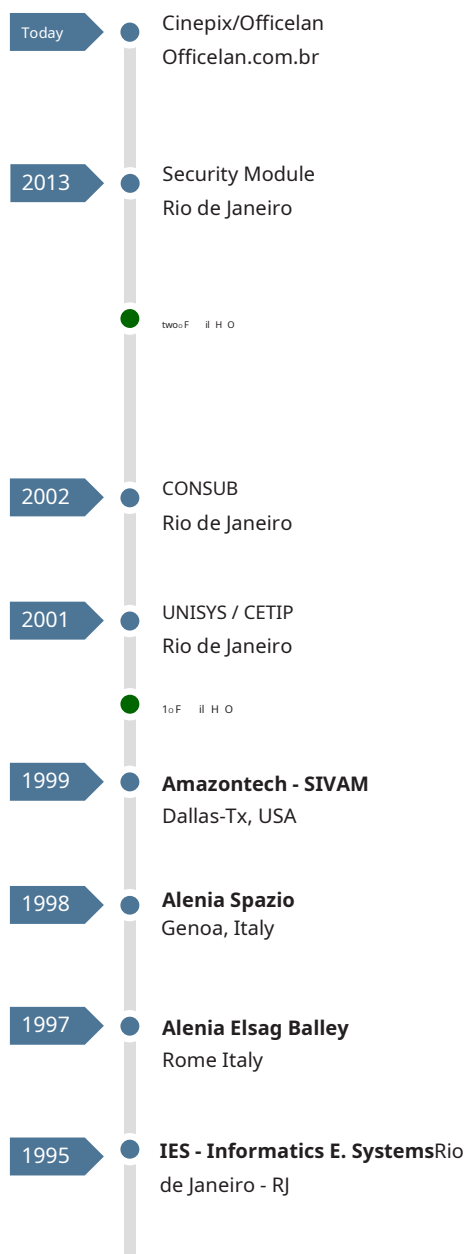## EDUCATION

UFF	Bachelor of Computer Science
UFRJ	Mathematics (incomplete)

SKILLS

C++, Java, OO, UML,

HTML5 OS, CSS3, PHP

Networks, RPC, WS,

SOA Assembly, MCU

Script, Docker, Vagrant

TIMELINE

Today — Cinepix/Officelan
Officelan.com.br

2013 — Security Module
Rio de Janeiro

two∘F   il H O

2002 — CONSUB
Rio de Janeiro

2001 — UNISYS / CETIP
Rio de Janeiro

1∘F   il H O

1999 — **Amazontech - SIVAM**
Dallas-Tx, USA

1998 — **Alenia Spazio**
Genoa, Italy

1997 — **Alenia Elsag Balley**
Rome Italy

1995 — **IES - Informatics E. Systems** Rio
de Janeiro - RJ

PERFISONLINE

Github
https://github.com/aleksmarcelo

Twitter
https://twitter.com/AleksMarcelo

Linkedin
https://www.linkedin.com/in/marcelo-aleks

Google+
https://plus.google.com/u/0/+MarceloAleksandravicius

ABSTRACT

Extensive experience in technology development and participation in several international systems, such as:

Mosaic – Alenia Spazio
(Italy, 3 years)

SIVAM – Amazon Surveillance System
(USA, 1 year)

Solid knowledge in design, development using mainly C, C++, Java and PHP languages, aiming, whenever possible, to apply the best design and drawing standards to the final product.

Search for solutions that present themselves as being the most creative and adequate to the specific problem.

Proficient development in multiplatform and distributed systems.

Development of several drivers (multi-io, serial, radar etc) and numerous embedded systems for Linux.

Design and development of several tools that help and improve the software development process.

Experience in Management.

REFERENCES

Stefano Scarpa
Alenia Marconi System – Product Manager Via Hermada, 6/B - 16154 Genova Italy **T** +39-010 6546-1

Fernando Manoel Athayde Reis IES – Managing Partner
Rua da Quitanda, 19 - Rio de Janeiro - RJ **T** + 55 21 2509-7630

Since June/2013	**Cinepix and Digital Forensic works– Rio de Janeiro**

●Forensic Expert Consultant working on digital investigations.

●Development of many programs to help the mobile data extraction, analysis and report cre
(FT, Spaibulator, StudioLaudo etc). https://forensicdesk.com

● Development of many firmwares using Zephyr RTOS.
● Ported ADB client/protocol to micro controller architecture (STM32F4 family), opening mar
possibilities to mobile communication and data extraction.

January/2013 to June/2013	**Modulo Security - Rio de Janeiro**

● Conception and integral development (Java, Java FX) of the
SISGAAZ project prototype.
● Algorithm development for generating tilesof the nautical charts inserted in the prototype
application.
● Development of auxialiary programs to capture real data from naval vessels to simulate real interation with
System simulation.

May/2003 to January 2013	**CONSUB - Rio de Janeiro**

● Development, integration and testing in MODFRAG, CORVETA, TRAINER, SÃO PAULO and LMS
Corvette and Frigate projects for the Brazilian Navy.

● Scenario Simulator Development (VxWorks / C++). Environment for the creation of
kinematics elements (air targets, surface, submarines, missiles, torpedoes,
meteorological balloons, etc.) and distribution to other on-board equipment simulators.

● Integral Modeling and Development of all simulators that reproduce
the following equipment for the SÃO PAULO Airplane Carrier:

      1. Scenario Simulator (FRAGATA, SP, CORVETTE, LMS)
      2. AIS simulator
      3. Radars (15, 23 and DECCA 1226)
      4. IFFs (15 and 23)
      5. Odometer
      6. Anemometer
      7. DGPS (Differential Global Position System)
      8. Integration with GAR

● Fixed bugs in XPORT 1011 multi serial driver for Linux OS.

● Development of a tool for validation and testing of XPORT 1011 multi serial communication
ports (Java, JNI).

● Design and implementation of several tools, libraries and frameworks to support
development and debugging.

September/2001 to May/2002	**CETIP - Rio de Janeiro**

Participation in the development of SPB (Brazilian Payment System). The system is completely
developed in Java using the J2EE platform (MDBs, EJBs, JMS queues, etc). MQ-Series Middleware
(IBM) for interconnecting the various Financial Institutions with the central clearings.

● Development of API to encrypt and decrypt messages.

● Creation of several programs to simulate/emulate the behavior of one or more
Financial Institutions (FIs); development of Beans (MDBs) for handling messages in JMS/
MQ queues.

February/99 to July/2001

Amazontech - USA (Dallas/TX)

Specification and elaboration of one of the subsystems of SIVAM (Amazon Surveillance System) that extracted "clues" (data under suspicion) and, through a heuristic matrix, sought possibly suspicious activities.
- Development of numerous HMIs in Java.
- Development of servers (managers) using CORBA middleware.
- Definition of security rules.
- Design and development of tools to accelerate the production of communication interfaces.
- Elaboration of all pertinent diagramming in UML.

June/97 to November/99

Alenia Spazio - Italy (Rome / Genoa)

Participation in the development of the MOSAICO System. System that aimed to simulate all combat processes in Italian Frigate Ships and, therefore, evaluate the propagation times of various information through its various subsystems to later propose changes and optimizations.
- Management of the development of the Control System for the Combat System Simulator.

- Consultancy provided in network technology, with performance tests to evaluate real-time systems and their implementation in order to reduce latency in communication between processes.

- Development of several libraries for use independent of the operating system (SOAPI) cross-platform and multi-thread (C++).

- Creation of non-native Widgets (Combo-Box, TabStack etc) for Motif.

- Evolution of the BSCGRAPH system (described in IES, below)

April/95 to June/97

IES - Informatics and System Engineering - Rio de Janeiro

Participation in the MODFRAG project (Frigate Modernization), developing HMI's, drivers (VxWorks: 739, 6501) and C++ libraries.

- Analysis and development of the BSCGRAPH system, a system for 3D visualization of objects submitted to magnetic resonance response verification.

- Development of Java applets for presentation and comparison of electromagnetic interference graphs.

Courses Presented

Introduce the JAVA language Alenia
Marconi Systems - Italy / Genova

Programmazione C++ via Microsoft Visual Studio
Alenia Marconi Systems - Italy / Genova

Visual C Programming
Informatique - RJ

C/C++ Programming, Java
Informatique - RJ

IMPROVEMENT COURSES

Mainframe Support
- NCE - Electronic Computing Nucleus - UFRJ

Advanced programming in C
- NCE - Electronic Computing Nucleus - UFRJ

Motif - Unix Programming
- LCG - Computer Graphics Laboratory

VMS for Programmers I
- Digital Education and Training - DIGITAL

VMS for Programmers II
- Digital Education and Training - DIGITAL

VAX/VMS System Architecture
- Digital Education and Training - DIGITAL

Advanced Programming Techniques in C / C++
- Digital Education and Training - DIGITAL

From	Stefano Scarpa, Rovetti Fausto		
Date	15/9/2000	Phone	+39106546627
		Fax	+39106546618
		E-mail	sscarpa@amsjv.it
			frovetti@amsjv.it

Subject: Reference letter for Marcelo Aleksandravicius

Marcelo Aleksandravicius was tasked in our Company as SW Developer from September 1997 to November 1999.

He was involved in MOSAICO project, the development of Combat System Simulation for Italian Navy. His activities regarded the development of Simulation GUI, porting of simulation from UNIX environment to Win Nt environment and development of a multiplatform SW library for networking and multithread management. The language used in this project was C and C++.

During our collaboration we appreciate his wide and deep knowledge of many aspects of SW Development Process.

He showed a very good experience in many fields, particulary:

- Development of easy-reuse and portable SW
- Bulding of application GUI, both in X-Window/Motif for UNIX platform and in Visual C for Win NT
- Multithreaded applications
- Real Time applications
- Networking applications
- Mastering of Internet resources as source of SW solutions
- Windows NT 4.0 and 9x O.S.

Stefano Scarpa   Rovetti Fausto

Head of System Analysis and Simulation   Project Manager of MOSAICO

Rio de Janeiro, 19 de setembro de 2000.

IES – 157/00

Subject: Reference letter for Marcelo Aleksandravicius

Marcelo Aleksandravicius has worked for our company as Software Developer from April 1995 To November 1999.

During this period, he was engaged mainly in the following projects:

- ModFrag – a Combat Management System to be installed in the Brazilian Navy Frigates. Development was done in C/C++ using Sun Workstations as host environment and VxVorks (Wind Rivers) as Target Operating System.

- BSC Graph – a graphic application capable of plotting a 3D image on a screen and control it in such a way that the user can position himself in a desired viewing point.
  The input data for the 3D image are files output by another software that computes electromagnetic fields. Development was done in C++ on a Unix platform.

- EMC Standards Database Comparison – an intranet application used to store information contained on different Electromagnetic Control standards, including texts and graphics, into a database and compare such standards using proper algorithms for the conversion of the data between them. Development was done in HTML, CGI and Java. Microsoft Frontpage was used as the HTML editor and JAVA Applets were used in the graphics comparison algorithms.

- MOSAICO – a Combat System Simulation project, developed for Alenia Marconi Systems, in its development site located in Genoa, Italy.

As a software developer, Mr Aleksandravicius produced very good results and acted as an excellent teamwork member.

Fernando Manoel Athayde Reis

Systems Director