

# GERALDO LUIS DA SILVA RIBEIRO — RESUMÉ

## SOFTWARE DEVELOPER, C++

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## WORK EXPERIENCE

✦ **SENIOR SOFTWARE DEVELOPER**, *Stefanini Rafael Security and Defense (STR)*,  
Dez./2021 — present, São José dos Campos, São Paulo

✦ *Stefanini Rafael Security and Defense (STR)* acts in the areas of **Security and Defense** in Brazil and Latin America, with innovative solutions and **high-technology equipment**. The STR is a joint venture between *Stefanini*, a Brazilian multinational that operates in the **IT services sector**, and the company *Rafael Advanced Defense Systems*, which is of Israeli origin.

- ✓ Applications for **Software Defined Radio (SDR)**; **C++**; **Linux**
- ✓ Applications for **Named Data Network (NDN)**; **C++**; **Linux**

✦ **SENIOR SOFTWARE DEVELOPER**, *Stefanini IT Solutions*,  
Jul./2019 — Dez./2021, São José dos Campos, São Paulo

✦ *Stefanini* is considered one of Brazil's success stories in terms of internationalization in the **IT sector** and has expanded to 41 countries since its foundation in 1987. The company focuses on services around **automation**, **cloud**, **Internet of Things** and **user experience**, as well as the application of **artificial intelligence** to traditional services such as **service desk** and **business process outsourcing**.

- ✓ Developed & maintained a **Software Communications Architecture (SCA)** Application to model waveforms and **generate C++** validated code to run on **Software Defined Radio (SDR)**. The **SCA** separates **waveform** software from the underlying hardware platform, facilitating waveform software **portability** and **re-use** to avoid costs of redeveloping waveforms. **Java/Eclipse Modeling Framework**.
- ✓ Developed & maintained a **Core Framework (CF)** that defines the essential "core" set of open software interfaces and profiles that provide for the deployment, management, interconnection, and intercommunication of software application components in an embedded, **distributed-computing** communication system. **C++**; **Linux**

✦ **SENIOR WEB DEVELOPER**, *Quero Educação*,  
Feb./2017 — Sep./2017, São José dos Campos, São Paulo

✦ *Quero Educação* is the **largest edtech** in Brazil, accelerated twice by **Y Combinator**, one of the 40 **Endeavor** companies in the World, in addition to being certified by the **Great Place to Work** and one of the 50 startups with the greatest impact in Latin America by the WEF World Economic Forum. With more than 6000 partner educational institutions, it has already enrolled 900 thousand students in its marketplaces *Quero Bolsa*, *Melhor Escola*, *ead.com.br*, *Guia da Carreira* and *Mundo Vestibular*.

- ✓ Developed scripts/utilities, feature implementation, bugfix, code optimization and test suites development for:
  - Educational Marketplace; **Linux**; **Ruby on Rails**; **PostgreSQL**; **VueJS**
  - Lead Management/CRM; **Linux**; **Elixir**; **PostgreSQL**; **VueJS**

✦ **SYSTEM ANALYST**, *Odebrecht Defense and Technology (Mectron)*,  
Dez./2014 — Feb./2017, São José dos Campos, São Paulo

✦ *Mectron* is a company specialized in the integration of systems with high technological content, which provides solutions to the demands of the defense and aerospace sectors. The main occupation is the development and integration of **intelligent weapons** and avionics systems/equipments to platforms for aircrafts, tanks, ships, land vehicles, etc.

- ✓ Worked on the **Brazilian Air Force's Link BR2** program
- ✓ System and software requirement analysis
- ✓ Development of **Linux Kernel Modules** for the **Secure Operational System**; **C**; **Linux**
- ✓ Development of **Distributed Persistence Layer** for Sensible Data; **C++**; **Linux**

✦ **ENGINEERING SYSTEMS INTEGRATION SPECIALIST**, *VSE*,  
Aug./2008 — Mar./2014, São José dos Campos, São Paulo

✦ *VALE Energy Solutions (VSE)* was a company established by *Vale* and *Brazil's National Development Bank (BNDES)*. VSE's goal was to develop sustainable processes for generating energy from renewable sources through

research in the areas of **thermal coal and biomass gasification**, and the production of **gas-powered turbines** and **heavy multi-fuel motors**.

- ✓ Developed & maintained the **Iron Pellet Plant Simulator - iSim** for the Tubarão Complex (VALE maintains the world's **largest pelletizing center**); **C++**; **FLTK**; **Numerical methods**;
- ✓ Developed & maintained Product Lifecycle Management for 3D models for numerical simulation/optimization; **JAVA**; **C++**; **Pro/Engineer**
- ✓ Developed & maintained Version Control System for 3D models for numerical simulation/optimization; **JAVA**; **C++**; **Pro/Engineer**
- ✓ Developed & maintained software, scripts and utilities for product optimization; **C++**; **Perl**; **ModeFRONTIER**; **Linux**

✦ **SENIOR TECHNOLOGIST II**, **FUNCATE**,  
Jan./2004 — Aug./2008, Cachoeira Paulista, São Paulo

► **Foundation for Science, Technology and Space Applications (FUNCATE)** is essentially dedicated to supporting government research and development institutions in implementing projects through specialised consultants, carrying out laboratory testing, which include issuing technical reports, metrology services, among others. The activities pertaining to this area are related to the processing and **analysis of remote sensors** aboard natural resource **satellites** and meteorological satellites.

- ✓ Developed & maintained the **CCDATS** (Command/Control, Data Acquisition and Treatment System) for performance qualification of Liquid Propulsion **Rocket Engine**; **HPUX**; **Linux**; **C++**

✦ **TECHNOLOGIST**, **National Institute for Space Research (INPE)**,  
Jan./1998 — Dez./2003, Cachoeira Paulista, São Paulo

► The **National Institute for Space Research (INPE)** is a research unit of the Brazilian Ministry of Science and Technology, whose main goals are fostering scientific research and technological applications and qualifying personnel in the fields of space and atmospheric sciences, **space engineering**, and **space technology**.

- ✓ Developed & maintained the **CATPA** (Computer Aided Thruster Performance Analysis) data acquisition and treatment system for the *Satellite Thruster Test Facility* <https://arc.aiaa.org/doi/pdf/10.2514/6.IAC-03-U.P.09>; **C++**; **Qt**
- ✓ Developed & maintained the **BTSA Information System**, a web tool to supporting the International Laboratory Accreditation process. **PHP**; **MySQL**

## PREVIOUS EXPERIENCES

- ✓ **Technology Instructor**, 1996 – 1999, Cachoeira Paulista
- ✓ **INPE Intern**, 1995 – 1997, Cachoeira Paulista
- ✓ **Mechanical Machining**, 1990 – 1993, Cachoeira Paulista

## SIDE PROJECT

- ✓ **dFerias**: web system for travel agencies; **C++**; **Rocks DB**; **Server side rendering**
- ✓ **BNN**: web system for the **Emaus Igualdade** (Brazilian chapter of the **Emmaus International Solidarity Movement**); **C++**; **Rocks DB**; **Server side rendering**
- ✓ **Sigma Prova**: web system for military course assessment tests for the **EEAR – Escola de Especialistas de Aeronáutica**; **C++**; **MySQL**

## EDUCATION AND CERTIFICATES

- ✓ 2007, **LPIC-1 Certification**, Linux Professional Institute
- ✓ 1996, **A.A.S. in Mechanical Design Technology**, **IESC**

## TECHNICAL SKILLS

- ✓ (15+ years): C, C++, Make, Git, Subversion, Bash, AWS, Apache, Nginx, MySQL, Berkeley DB, HTML, CSS, Javascript
- ✓ (5+ years): Docker, Rocks DB, PostgreSQL, Ruby, Perl, VueJS
- ✓ (3+ years): Java, Eclipse Modeling Framework
- ✓ (Studying): **CSSLP** (Certified Secure Software Lifecycle Professional), NuxtJS, Tailwind
- ✓ <https://geraldo.dev/certificate/>

## LANGUAGES

- ✓ **English** — Intermediate
- ✓ **Portuguese** — Native