

CURRICULUM VITÆ

ALEX PAULO ALVES DE OLIVEIRA

» » "There is no way to happiness. Happiness is the way." Thich Nhat Hanh « «

- › **Status:** PhD student. Master and Bachelor in Computer Science
- › **Fields:** Software Development, Education, Geospatial Solutions Engineer
- › **Stack:** ReactJS, React Native, Node.js, OpenLayers, Leaflet, Python
- › **Tools:** Git, PostgreSQL, PostGIS, Linux, VSCode, Netlify, Overleaf, QGIS
- › **Passions:** Study, Run, Travel, Challenges

Bank Technician level III BANESE - Bank of the State of Sergipe Systems Analyst Software Engineer

2004 - 2007

- ➔ Banking automation systems, built with the following technologies:
 - ▣ Java
 - ▣ C++
 - ▣ .NET platform, using the C# language

Professor FASER - Sergipana College

2005 - 2005

- ➔ Content taught in the classroom:
 - ▣ Introduction to information technology
 - ▣ Spreadsheets

Professor FANESE - Administration and Business College of Sergipe

2006 - 2006

- ➔ Content taught in the classroom:
 - ▣ Data and File Structure

Professor IFS - Federal Institute of Sergipe Software Engineer

2007 - NOW

- ➔ Content taught in the classroom:
 - ▣ Javascript
 - ▣ Typescript
 - ▣ Python
 - ▣ ReactJS
 - ▣ React Native
 - ▣ Data Science
- ➔ Development of a system for managing scientific publications in brazilian events:
 - ▣ Publications System ==> <https://publicacoes.ifs.edu.br>

Systems Analyst EMBRAPA - Brazilian Agricultural Research Corporation Software Engineer Geospatial Data Engineer

2008 - NOW

- ➔ Development of administrative softwares on the company's Intranet:
 - ▣ Intranet Pathway Control System
 - ▣ Intranet messaging system
 - ▣ Resource Reservation System
 - ▣ Institution Management System
 - ▣ Indicator management system
 - ▣ Competency Management System
 - ▣ Production Monitoring System
- ➔ Development of Geographic Information Systems:
 - ▣ GeoTC Portal ==> <https://geotc.cpatc.embrapa.br>
 - ▣ GeoBSF Portal (Coming Soon) ==> <https://geobsf.cpatc.embrapa.br>
- ➔ Development of Mobile Systems:
 - ▣ Sanicoco (Coming Soon) ==> Images, descriptions and remedies for coconut pests and diseases
- ➔ Technologies adopted in Embrapa's work:
 - ▣ Linux
 - ▣ Git
 - ▣ GitLab
 - ▣ GitHub
 - ▣ Quantum GIS
 - ▣ Leaflet
 - ▣ OpenLayers
 - ▣ REST API
 - ▣ Latex
 - ▣ Javascript
 - ▣ Typescript
 - ▣ Python
 - ▣ ReactJS
 - ▣ React Native
 - ▣ Styled Components
 - ▣ Recharts
 - ▣ Joomla
 - ▣ Geoserver
 - ▣ Anaconda
 - ▣ PostgreSQL
 - ▣ PostGIS
 - ▣ PL/pgSQL

EXPERIENCE

**Bachelor's Degree
in Computer Science****UNIT - Tiradentes University**

1998 - 2003

- ➔ Knowledge acquired in this training:
- Systems Analysis ■ Data Modeling ■ Software Programming ■ Interaction with SGBDs
 - Fundamentals about Computer Networking ■ Artificial Intelligence Concepts

**Postgraduate Degree
in Computer Science - System, Networking, and LAN/WAN Management/Manager****UNIT - Tiradentes University**

2004 - 2005

- ➔ Knowledge acquired in this training:
- Computer Network Architecture ■ TCP/IP Architecture ■ OSI Model
 - Computer Network Management ■ Distributed Systems ■ Security in Computer Networks

**Master's Degree
in Computer Science****UFPE - Federal University of Pernambuco**

2011 - 2013

- ➔ Dissertation Theme:
- A Wood Classification System
- ➔ Knowledge acquired in this training:
- Cross-Validation ■ Instance Based Learning ■ Kullback-Leibler Divergence Operator
 - Data Normalization ■ K-NN Algorithm ■ Computer Vision ■ LBP (Local Binary Patterns)
 - Noise Treatment ■ Machine Learning

**Postgraduate Degree
in Geoprocessing with qualification in Georeferencing of Rural Properties****UNIT - Tiradentes University**

2017 - 2018

- ➔ Knowledge acquired in this training:
- Cartography ■ Topography ■ Geodesy ■ Photogrammetry ■ Environmental Licensing
 - Geographical Databases ■ Legislation for the georeferencing of rural properties
 - Digital Image Processing ■ Spatial Analysis using GIS software ■ Remote sensing

**PhD's Degree
in Development and Environment****UFRN - Federal University of Rio Grande do Norte**

2022 - NOW

- ➔ Thesis Theme:
- Space-time analysis of environmental degradation of the Biome's Cerrado and its relationship with the development of agribusiness from perspective to sustainability (under review: may change)
- ➔ Knowledge acquired in this training (Still in progress. Will be updated later):
- Ecosystems ■ Sustainability ■ Geographical Databases ■ Noise Treatment ■ Machine Learning

Tributes at IFS (Federal Institute of Sergipe):

2007 - NOW

- ➔ Homage of honor to scientific academic merit for software registration at the National Institute of Industrial Property (INPI) through the IFS technological innovation nucleus

Tributes at EMBRAPA (Brazilian Agricultural Research Corporation):

2008 - NOW

- ➔ My software development methodology was considered the best in Brazil, within the scope of Embrapa which is present in all Brazilian states
- ➔ Video made available by TV Globo, in 2023, about the GeoTC software, whose sole developer is me.

PATENTS

- ➔ Branch control system used by the Federal Institute of Sergipe (**Controle de Ramais**)
- ➔ Management of the Congress entitled CONNEPI (**Gestão do CONNEPI**)
- ➔ Intranet of the Federal Institute of Sergipe (**Intranet do IFS**)
- ➔ System of Scientific Publications of the Federal Institute of Sergipe (**Gestão de Publicações**)
- ➔ Self-Assessment Commission of the Federal Institute of Sergipe (**CPA - Comissão Própria de Avaliação**)

LANGUAGES IN WHICH I CAN COMMUNICATE

- ➔ PORTUGUESE
- ➔ ENGLISH
- ➔ SPANISH

LANGUAGES