## THALLES SANTOS SILVA

#### Work Experience

EMPLOYER Eldorado Institute of Technology
POSITION Software Engineer

Campinas, Brazil - May 2015 — Currently

- Maintained a constant interaction with project's customers which led to high feed backs on customers satisfaction.
- Contributor to the internal Machine Learning research group that allowed the company to get new customers.

EMPLOYER Great Lakes Forestry Centre Sault Ste Marie, Canada - May 2014 — November 2014
POSITION Researcher Junior

- Led implementation of the R opentraj package for creating and analyzing air trajectory data which was the main computational tool for a research project on insects' transportation.
- Library that encapsulates the core functionalities of the *Hybrid Single Particle Lagrangian Integrated Trajectory Model* (HYSPLIT) software in order to have total access of its results from within the R environment.

EMPLOYER RCS Informática Itabuna, Brazil - March 2012 — June 2013
POSITION Software Developer (Part Time)

- Contributed to developing Protocol and Daily Management systems which led to an increase in company's revenue.
- Redesigned the Enterprise's website leading to a significant reduction in customer supporting calls.

### FORMAL EDUCATION/ACADEMIC DEGREES

DEGREE
UNIVERSITIES
UNIVERSITIES
UNIVERSITIES
UNIVERSITIES
UNIVERSITIES
Algoma University
EXCHANGE
EXCHANGE
University
Science Without Borders - 1.5 year scholarship from the Brazilian Government.

- Three years as Student Researcher sponsored by Research Support Foundation of the State of Bahia FAPESB.
- Theses in Computer Science: Parallel Processing Using Hybrid Techniques for Applications in Transport of Particles based on Monte Carlo method. Technologies: NVIDIA CUDA, OpenMP e MPI.
- EasyKanban (2012). Web-based application for project management. Awarded First Prize in Computer Science Software Engineering Class Contest.
- Application for compressing and encrypting text files using Huffman algorithm which can reduce file's size up to 60%. Awarded First Prize in Computer Science Programming Class Contest, (2010).

#### Complementary Education

NANODEGREES

Udacity Deep Learning

COURSES

COURSES

ONLINE

COURSES

Udacity Deep Learning

Learning

April 2016 - September 2016

Algoma University - 2013 - 2014

Achieve Languages - English Course

ONLINE

COURSES

COURSES

ONLINE

COURSES

Udacity Deep Learning

April 2016 - September 2016

Algoma University - 2013 - 2014

Programming; Deep Learning; Artificial Intelligence; C++ for C Programmers; Intro to Machine Learning. (Certificates available upon request).

#### RESEARCH PROJECTS / PRESENTATIONS IN EVENTS

UNIVERSITY The State University of Santa Cruz Ilhéus, Brazil
ADVISOR Esbel Tomás Valero Orellana CV: http://lattes.cnpq.br/8384020879567133
FUNDING INSTITUTION Research Support Foundation of the State of Bahia – FAPESB

- Parallel processing on high performance stations applied to particle transport simulation using the Monte Carlo method (2012 2013).
- Parallel processing using Graphics processing units (GPUs) applied to particle transport simulation with the Monte Carlo method (2011 2012).
- Parallel implementations for Random Walk Algorithms Volunteer (2010 2011).
- Parallel implementations of the Random Walk Algorithm (Presentations)
  - The State University of Santa Cruz UESC XVIII Scientific Seminar (2012).
  - The State University of Santa Cruz UESC Computer Week (2011).

### THALLES SANTOS SILVA

SKILLS

LANGUAGES C; C++; C#; R; PHP; Python; SQL; CUDA; OpenMP; MPI; JavaScript

Frameworks AngularJS, KnockoutJS, TensorFlow, Sklearn

Databases MySQL, PostgreSQL, MongoDB

TECHNOLOGIES Jupyter Notebooks; Git; Visual Studio

OPERATING SYSTEMS Linux; MAC OS; Windows;

#### LANGUAGES

• English and Portuguese

#### Projects

For more projects, please refer to my linkedn or github accounts.

https://www.linkedin.com/in/thalles-silva-32ab08a3/

https://github.com/thalles753/

# NAME RNN Language Translation

Mar 2017

GITHUB Github code link

• Sequence to Sequence Recurrent Network model to translate English sentences to French. The model emphasizes the use the seq2seq Tensorflow's API, as well as the common data processing steps to successfully train a seq2seq model for language translation.

## Name Asynchronous Actor Critic (A3C) Tensorflow implementation

Jan 2017

GITHUB Github code link

• My version of the Asynchronous Actor Critic (A3C) Tensorflow implementation from Google's DeepMind using Tensorflow and Openai Gym.

### Name Street View Sequence Recognition

Sep 2016

GITHUB Github code link

• Deep Convolutional Network for recognizing sequences of digits from google maps street view images. Deployed several techniques for analyzing and synthetically increasing dataset's varieties to achieve very good results.

## NAME Creating Customer Segments - Unsupervised Learning

June 2016

GITHUB Github code link

• Reviewed unstructured data to understand the patterns and natural categories that the data fits into. Used multiple algorithms and both empirically and theoretically compared and contrasted their results. Made predictions about the natural categories of multiple types in a dataset, then checked these predictions against the result of unsupervised analysis.

# Name Predicting Boston Housing Prices

May 2016

GITHUB Github code link

• Built a model to predict the value of a given house in the Boston real estate market using various statistical analysis tools. Identified the best price that a client can sell their house utilizing machine learning.

#### References

- Dr Jean-Noel Candau, Scientist, Great Lakes Forestry Centre, Sault Ste Marie, Ontario, Canada. Jean-Noel.Candau@NRCan-RNCan.gc.ca
- Dr Esbel Tomás V. Orellana, Teacher, The State University of Santa Cruz, Ilhéus, Brazil. valero.esbel@gmail.com
- Mydiã Falcão Freitas, Software Engineer, RCS Informática, Itabuna, Brazil. mydyfreitas@gmail.com