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GitHub

GOAL: Remote Data Analyst / Python developer

SHORT INTRODUCTION

In my doctoral work (finished) I've used Machine Learning algorithms to analyze video content. I'm passionate about solving challenging problems with programming, and when IA and Machine Learning are involved, I like it even more.I consider myself a strongly analytical person and I can tell very good stories with data. I'm always hungry to learn more about pretty much everything.Since I was a teen, I've programmed in several languages (Fortran77, C/Motif, Java and Matlab are the ones I programmed for longer periods, 2+ years each). Currently I'm studying Python applied to Data Science and blockchain/cryptocurrencies.

RELEVANT SKILLS

Advanced: ⬢ Scientific Programming ⬢ Research ⬢ Machine Learning ⬢ Image/video processing ⬢ Data Analysis ⬢ Object Oriented Programming (Java) ⬢ Clean Code ⬢ Fluent English (written and conversational) ⬢ Quality Writing (English & Portuguese) ⬢ Fast & Eager Learner
Intermediate: Web development ⬢ html/css ⬢ JavaScript ⬢ Python ⬢ C/C++ ⬢ SQL (MySQL) ⬢ Visual Studio Code ⬢ Mathlab ⬢ Agile Dev ⬢ GitHub ⬢ Linux

Currently Learning: Scientific Computing with Python
Currently Reading: The Pragmatic Programmer, D. Thomas & A. Hunt

RECENT CERTIFICATIONS

Javascript Algorithms and Data Structures (freecodecamp - 300h) ***March, 2022***
Scientific Computing with Python (freecodecamp - 300h) ***In progress***

EDUCATION

Doctoral Degree, Computer Science ***2007-2011***
Federal University of Minas Gerais

I've studied Machine Learning algorithms (mainly Support Vector Machines - SVM) to evaluate and compare video content. The main challenge was to find features that would be descriptive enough for searching high-level content in videos.

My solution involved two steps. In the first step, we've collected low-level image features on frames to identify specific objects. I've used a public annotated database for training several SVMs, each one aimed at detecting a different object from an image.

The second step involved using the previously trained SVMs to establish the presence of specific objects in several frames extracted from the videos. The output of the object-detection SVMs was used to build a high-level feature vector for each video, in which each feature was the probabilistic presence of the selected objects.

Our approach performed better than pure low-level features approaches and some other mixed approaches in the literature. At the time, there wasn't any other approach using objects' presence as features for video comparisons.

Master Degree, Industrial Informatics ***1994-1996***
Federal Technological University of Paraná

C/C++ programming

Bachelor Degree, Physics ***1989-1993***
Federal University of Rio de Janeiro

Fortran programming

CERTIFICATES (*in Progress*)
⬢ Spring React Workshop (devsuperior.com) ⬢ Scientific Computing with Python (freecodecamp.com)
⬢ JavaScript Algorithms and Data Structures (freecodecamp.com)

PROFESSIONAL EXPERIENCE
Freelancer, Upwork and others ***2021 - to date***

Owner, Mais Aprendizagem ***2012 - 2021***
- I've implanted, managed and published WordPress+OptimizePress websites (also, programmed a few php scripts now and then).

Tenured Professor, Santa Cruz State University ***1999 - 2012***
- I've **taught** mainly **Programming Basics (C/C++/Java)**, **Object-Oriented Programming**, and **Data Structures**.

- I've implemented and implanted a client-server web tool (EpA) for distance learning research on cooperative writing. Implementation in Java (MVC pattern, Servlets), MySQL, TomCat/Apache remote server. Used Eclipse IDE and SVC for version control (2 students under my supervision). Data collected from students using EpA was used for a scientific paper. (2-year experience)

Professor, Pontifical Catholics University of Paraná ***1996-1999***
- I've taught mainly **Office Usage (Word & Excel)**, **Programming Basics (C/Java), Object-Oriented Programming, Numerical Calculus** and **Linear Algebra**.