

ENGLISH LEVEL

Good level of Reading, Writing, and Listening skills. Intermediate level in Conversation.

SOFT SKILLS

I have good rapport and communication with both the team and clients. I enjoy aligning delivery expectations to prevent misunderstandings. I am proactive in identifying and resolving issues. I take pride in the quality of code, presentations, and report writing.

HARD SKILLS

Programming Languages and ScriptingPython - Shell Script - C/C++ - Regex

Data Manipulation and Analysis Pandas - Numpy - SQL

Data Visualization

Seaborn - Plotly - Matplotlib - Ydata-profiling - Missingno

Machine Learning Libraries

Scikit-Learn - PyOD (Python Toolkit for Outlier Detection) - Imbalance-learn - WEKA

Deep Learning Frameworks and Tools

Tensorflow - Keras - PySpark - YOLO - OpenCV - Caffe - SHAP - LIME

Natuaral Language Processing (NLP)

Gensim - NLTK - Hugging Faces - Word2vec - Prod2vec - Meta-Prod2Vec

Recommender Systems (RecSys)

LightFM (Factorization Machines)
Gru4Rec - Transformers4Rec

Web Development and Scraping

WebScraping - Beautifulsoup

Development Environment and Tools

Anaconda - Jupyter Notebook - Git - Pytest - Doxygen - QtCreator - CppCheck

Other Libraries and Utilities

Docker - BoostUTF - LaTeX - Presidio (Data Protection and De-identification SDK)

Ítalo de Pontes Oliveira

M.Sc. in Computer Vision Data Scientist

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Linkedin: https://www.linkedin.com/in/italo-de-pontes/

Google Scholar: https://scholar.google.com.br/citations?user=3R5wdZIAAAAJ

E-mail: <u>italodepontesoliveira93@gmail.com</u>

ACADEMIC BACKGROUND

Ph.D. interrupted in Computer Science Subarea: Recommendation Systems (RecSys) Federal University of Campina Grande (UFCG)	2017 - 2020
Master's degree in Computer Science Subarea: Deep Learning & Computer Vision Federal University of Campina Grande (UFCG)	2014 - 2016
Technologist in Telematics Subarea: Digital Video Processing Federal Institute of Education of Paraíba (IFPB)	2010 - 2013

Lead Data Scientist at Fabwork Clients: Leroy Merlin, Heineken, Gerdau, B3, Incentivar, Ministry of	2020 - 2023 (3 years)
Education Areas: Various (forecasting, stockout/stock over prediction, default prediction, market-share prediction, and others)	(o yearo)
Machine Learning Engineer Client: Siemens (R&D project) Area: churn prediction	2022 - 2023 (1 year)
Natural Language Processing Engineer Client: Dell (R&D project) Area: Natural Language Processing	2019 - 2022 (3 years)
Data Scientist Freelancer Cliente pediu para não ser revelado (NDA) Area: Fraud Detection (<u>Github</u>)	2019 - 2020 (6 months)
Computer Vision Engineer Client: HP (projeto P&D) Area: Object Detection and Recognition	2015 - 2016 (1 year)
Software Engineer Client: IFPB (PIBICT project) Area: UML modeling methods	2011 - 2012 (1 year)

AWARDS

News

Silver Medal in the Hackfest Competition	2017
Challenge sponsored by the Public Ministry.	
https://github.com/quebraquebra	
Ouebra Câmara-Ouebra Senado	

IEEE Student Group Revelation in Latin America

2013

I was <u>president</u> of the IEEE-affiliated student group, which was recognized in Latin America for the work developed (certificate).

LINKEDIN BADGE in

Top 15% in Python Top 15% in Machine Learning

PATENT

SQUALES (BR 512014000292-6)

<u>Intellectual Property</u> registered at INPI. Software for video processing.

SHORT COURSES

Coursera - TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning (certificate) Udemy - Spark and Python for Big Data with Pyspark (certificate) 2 SCIENTIFIC PAPERS CONFERENCES Video Audience Analysis using Bayesian Networks and Face Demographics Conference on Graphics Patterns and Images - (SIBGRAPI) Improving Face Detection Performance by Skin Detection Post-Processing Conference on Graphics Patterns and Images - (SIBGRAPI) A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks Conference on Graphics Patterns and Images - (SIBGRAPI) Temporal Analysis and Perceptual Weighting for Objective Video Quality Measurement IEEE Southwest Symposium on Image Analysis and Interpretation - (SSIAI) Spatial and Temporal Analysis Considering Relevant Regions Applied to Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) 2 President at the IEEE Student Branch of IFPB-CG		
and Deep Learning (certificate) Udemy - Spark and Python for Big Data with Pyspark (certificate) 2 SCIENTIFIC PAPERS CONFERENCES Video Audience Analysis using Bayesian Networks and Face Demographics Conference on Graphics Patterns and Images - (SIBGRAPI) Improving Face Detection Performance by Skin Detection Post-Processing Conference on Graphics Patterns and Images - (SIBGRAPI) A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks Conference on Graphics Patterns and Images - (SIBGRAPI) Temporal Analysis and Perceptual Weighting for Objective Video Quality Measurement IEEE Southwest Symposium on Image Analysis and Interpretation - (SSIAI) Spatial and Temporal Analysis Considering Relevant Regions Applied to Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) 2 President at the IEEE Student Branch of IFPB-CG 2	Coursera - SQL for Data Science (certificate)	2024
SCIENTIFIC PAPERS CONFERENCES Video Audience Analysis using Bayesian Networks and Face Demographics Conference on Graphics Patterns and Images - (SIBGRAPI) Improving Face Detection Performance by Skin Detection Post-Processing Conference on Graphics Patterns and Images - (SIBGRAPI) A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks Conference on Graphics Patterns and Images - (SIBGRAPI) Temporal Analysis and Perceptual Weighting for Objective Video Quality Measurement IEEE Southwest Symposium on Image Analysis and Interpretation - (SSIAI) Spatial and Temporal Analysis Considering Relevant Regions Applied to Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) 2 President at the IEEE Student Branch of IFPB-CG	· · · · · · · · · · · · · · · · · · ·	2019
Video Audience Analysis using Bayesian Networks and Face Demographics Conference on Graphics Patterns and Images - (SIBGRAPI) Improving Face Detection Performance by Skin Detection Post-Processing Conference on Graphics Patterns and Images - (SIBGRAPI) A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks Conference on Graphics Patterns and Images - (SIBGRAPI) Temporal Analysis and Perceptual Weighting for Objective Video Quality Measurement IEEE Southwest Symposium on Image Analysis and Interpretation - (SSIAI) Spatial and Temporal Analysis Considering Relevant Regions Applied to Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) 2 President at the IEEE Student Branch of IFPB-CG	Udemy - Spark and Python for Big Data with Pyspark (certificate)	2019
Video Audience Analysis using Bayesian Networks and Face Demographics Conference on Graphics Patterns and Images - (SIBGRAPI) Improving Face Detection Performance by Skin Detection Post-Processing Conference on Graphics Patterns and Images - (SIBGRAPI) A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks Conference on Graphics Patterns and Images - (SIBGRAPI) Temporal Analysis and Perceptual Weighting for Objective Video Quality Measurement IEEE Southwest Symposium on Image Analysis and Interpretation - (SSIAI) Spatial and Temporal Analysis Considering Relevant Regions Applied to Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) 2 President at the IEEE Student Branch of IFPB-CG	SCIENTIFIC PAPERS	
Demographics Conference on Graphics Patterns and Images - (SIBGRAPI) Improving Face Detection Performance by Skin Detection Post-Processing Conference on Graphics Patterns and Images - (SIBGRAPI) A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks Conference on Graphics Patterns and Images - (SIBGRAPI) Temporal Analysis and Perceptual Weighting for Objective Video Quality Measurement IEEE Southwest Symposium on Image Analysis and Interpretation - (SSIAI) Spatial and Temporal Analysis Considering Relevant Regions Applied to Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) 2 President at the IEEE Student Branch of IFPB-CG	CONFERENCES	
Post-Processing Conference on Graphics Patterns and Images - (SIBGRAPI) A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks Conference on Graphics Patterns and Images - (SIBGRAPI) Temporal Analysis and Perceptual Weighting for Objective Video Quality Measurement IEEE Southwest Symposium on Image Analysis and Interpretation - (SSIAI) Spatial and Temporal Analysis Considering Relevant Regions Applied to Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) 2 President at the IEEE Student Branch of IFPB-CG	Demographics	2019
A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks Conference on Graphics Patterns and Images - (SIBGRAPI) Temporal Analysis and Perceptual Weighting for Objective Video Quality Measurement IEEE Southwest Symposium on Image Analysis and Interpretation - (SSIAI) Spatial and Temporal Analysis Considering Relevant Regions Applied to Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) President at the IEEE Student Branch of IFPB-CG	Post-Processing	2017
Measurement IEEE Southwest Symposium on Image Analysis and Interpretation - (SSIAI) Spatial and Temporal Analysis Considering Relevant Regions Applied to Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) 2 President at the IEEE Student Branch of IFPB-CG	A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks	2016
Video Quality Assessment Brazilian Symposium on Telecom. and Signal Processing - (SBrT) Objective estimation of 3D video quality: A disparity-based weighting strategy IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) President at the IEEE Student Branch of IFPB-CG	Measurement IEEE Southwest Symposium on Image Analysis and Interpretation -	2014
IEEE International Symposium on Broadband Multimedia Systems and Broadcasting - (BMSB) JOURNALS Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) 2 President at the IEEE Student Branch of IFPB-CG	Video Quality Assessment	2013
Study of the Relation Between Spectators Gender and Video Content Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) President at the IEEE Student Branch of IFPB-CG	strategy IEEE International Symposium on Broadband Multimedia Systems and	2013
Theoretical and Applied Informatics Journal (RITA) Design of Objective Video Quality Metrics Using Spatial and Temporal Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) President at the IEEE Student Branch of IFPB-CG 2	JOURNALS	
Information IEEE Latin America Transactions Fuzzy logic and temporal information applied to video quality assessment Journal of Mobile Multimedia (JMM) ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) President at the IEEE Student Branch of IFPB-CG 2		2016
ACADEMIC SERVICES Young Professional Member of the IEEE (Member #92518522) President at the IEEE Student Branch of IFPB-CG 2	Information	2015
Young Professional Member of the IEEE (Member #92518522) President at the IEEE Student Branch of IFPB-CG 2		2013
President at the IEEE Student Branch of IFPB-CG 2	ACADEMIC SERVICES	
	Young Professional Member of the IEEE (Member #92518522)	2014
Student member of the Brazilian Telecommunications Society (SBrT) 2	President at the IEEE Student Branch of IFPB-CG	2013
	Student member of the Brazilian Telecommunications Society (SBrT)	2013