Adelson D. de Araújo jr

Personal Data

Place and Date of Birth:	Natal, Brazil, 26 March 1995
Address:	H.C. Pootstraat 56, 7552WP, Hengelo, the Netherlands
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GitHub	adaj
Google Scholar	Adelson Araujo
Personal page	https://adaj.github.io

Education

10/2020 - Current

Ph.D. (now attending) in Technology Enhanced Learning
University of Twente, the Netherlands
"Conversational Agents for Collaborative Science Learning"
Supervisors: Ton de Jong, Susan McKenney, Pantelis Papadopoulos

07/2017 - 09/2019

M.Sc. in Systems and Computing
Federal University of Rio Grande do Norte, Brazil
"Predspot: Predicting Crime Hotspots with Machine Learning"
Supervisors: Nelio Cacho, Leonardo Bezerra

07/2016 - 06/2018

B.Eng. in Computing Engineering
Federal University of Rio Grande do Norte, Brazil
"A Framework for Crime Hotspot Detection in Smart Cities"
Supervisors: Nelio Cacho, Leonardo Bezerra

07/2013 - 06/2016

Undergraduate in Science & Technology
Federal University of Rio Grande do Norte, Brazil
Scope: Math, Physics, Eletronics and Programming

Work Experience

04/2019 - 08/2020

Data Engineer at Public Ministry of Rio G. do Norte (MPRN) - Natal, Brazil
Responsibilities (a) managed on-premises data lake infrastructure with HDFS
and multiple ETL workflows,(b) developed NLP tools for crime investigation,
(c) designed dashboards to analyse public budgeting distribution.

10/2015 - 08/2020

Research Assistant at SmartMetropolis - Natal, Brazil
Responsibilities: (a) researched and implemented predictive policing
tools/scripts for crime predictive analysis; (b) helped to organize
international academic events.

Personal Awards

2018   **Google**'s *Latin America Research Award* (LARA) project funding
Project name: "Automating Patrol Planning by Learning from Crimes and News"

2019   **Google**'s *Latin America Research Award* (LARA) project funding
Project name: "Towards Interpretation and Interaction of Predictive Policing Systems
based on Machine Learning"

Languages

PORTUGUESE:	Mothertongue.
ENGLISH:	Speaks fluently.
DUTCH:	Starting to learn.

Programming Languages

PYTHON:	Writes fluently.
R, JAVA, C++:	Not so experienced, only with small projects.

Programming Frameworks

MACHINE LEARNING:	Expertise with time series analysis, spatial analysis, and NLP. I mostly use Tensorflow, HuggingFace, scipy, scikit-learn. Of course willing to learn other frameworks as well.
DATA WRANGLING:	Jupyter and Pandas (+5 years actively using it).
WEB SERVICES:	Flask, FastAPI.
DATA PIPELINES:	Hadoop HDFS, Apache Ni-Fi, cron jobs, Dremio, PowerBI.

Recent Online training

DEEPLEARNING.AI + COURSERA:	Natural Language Processing Specialization (2021).

Selected Publications

Kounadi, O., Ristea, A., **Araujo, A.**, Leitner, M. (2020). A systematic review on spatial crime forecasting. Crime science, 9(1), 1-22. (PDF)

Araujo, A., Cacho, N., Thome, A. C., Medeiros, A., Borges, J. (2017). A predictive policing application to support patrol planning in smart cities. In 2017 International smart cities conference (ISC2) (pp. 1-6). IEEE. (PDF)

de Araujo, A., Garcia, I., Cacho, N., ... Lopes, F. (2020). A platform for citizen cooperation during the COVID-19 pandemic in RN, Brazil. In 2020 IEEE international smart cities conference (ISC2) (pp. 1-8). IEEE. (PDF)