Adelson D. de Araújo jr

Personal Data

PLACE AND DATE OF BIRTH:	Natal, Brazil, 26 March 1995
EMAIL:	a.dearaujo@utwente.nl
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)