

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
PHONE: +31 6 43136220
EMAIL: a.dearaujo@utwente.nl
GITHUB: [adaj](https://github.com/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 and scikit-learn (<3).
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

DEEPLARNING.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, September). 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](#))

REFERENCES

Supervisor	Ton de Jong (a.j.m.dejong@utwente.nl)
Supervisor	Susan McKenney (susan.mckenney@utwente.nl)
Dialy supervisor	Pantelis Papadopoulos (p.papadopoulos@utwente.nl)
Previous supervisor	Nélio Cacho (neliocacho@dimap.ufrn.br)
Research colleague	Ourania Kounadi (ourania.kounadi@univie.ac.at)