

DIOGO DUTRA

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SUMMARY

Data Scientist with +10 years of international experience in Defense and Aerospace industries.

I have an entrepreneurial vein, lots of programming skills and a passion for product development.

EDUCATION

Deep Learning 2019
NanoDegree [Udacity](#)

Machine Learning 2018
NanoDegree [Udacity](#)

Data Science 2017
Course [edX](#)

MBA 2011-2012
Entrepreneurship [FGV](#)

Master 2006-2007
Aeronautics Engineering [ITA](#)

Bachelor 2001-2005
Mechanics Engineering [IME](#)

SKILLS

PyTorch, Scikit-learn, CNN, RNN, Python, C++, JIRA, Scrum, Git, Matlab, Simulink.

English, French, Portuguese.

KEY ACCOMPLISHMENTS

- ✓ Created a Neural Network to **detect covert weapons** with radar
- ✓ Created a **quadcopter autopilot** using Reinforcement Learning
- ✓ **Increased missile flight lifespan** from 1 to 10 minutes by applying data fusion of INS, GPS and baroaltimeter with Kalman Filter
- ✓ **Predicted flight delays** with Deep Learning within margin of 15 min
- ✓ **Reduced 30% of \$5M stock** value of spare parts by applying data analysis on MRO warehouse ERP database

WORK EXPERIENCE

LEAD DATA SCIENTIST

Canada

[PatriotOne](#)

Jul 2019 – on-going

- Applied Convolution Neural Network (PyTorch) and Digital Signal Processing on radar signals. Development of an alert system capable of covertly screening moving individuals for on-body concealed weapons
- Got promoted in 3-months to mentor and lead a technical team; reported directly to VP of Engineering

SENIOR CONSULTANT

Brazil, Portugal

[Natura](#), [Altran](#)

Apr 2017 – Jul 2019

- Embedded C++ code for automotive cluster: BMW and Continental
- Proofs-of-Concept for Industry 4.0 including Additive Manufacturing (3D printing), Augmented Reality and Artificial Intelligence

CTO

Brazil

[goEPIK](#)

Nov 2016 – Jun 2017

- Co-founded the most attractive Brazilian startup in 2017 during my part-time by offering Augmented Reality app for maintenance

SYSTEMS ENGINEER

France

[DCNS](#), [ICN](#)

Apr 2013 – Mar 2017

- Commissioning of submarine combat system (IVVQ, STW and FAT)

PROJECT AND COMMERCIAL MANAGER

Brazil

[Mectron](#)

Nov 2011 – Mar 2013

- \$200K contract prospected and managed, ending with profit

AEROSPACE ENGINEER

Brazil, South Africa

[Embraer](#), [Denel](#)

Sep 2007 – Nov 2011

- Guidance, Control, Navigation for missiles; simulation of jet fighter