DUARTE O.CARMO

From Portugal, based in Copenhagen, Denmark Last updated: April 2023

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EXPERIENCE

2021

2022 Self-employed, Technology Consultant - DK

Helping startups and established companies solving challenging problems with Machine Learning, Data, and Software Engineering

- Created an efficient similarity search engine for over 200K pharmaceutical drugs for a Denmark-based startup
- Built a large-scale end-to-end data pipeline to analyze text from millions of companies for ESG reporting for a startup based in Belgium
- Lead a team of two through the development of 6 end-to-end ML pipelines with over 1,000 daily active users for SF based Scaleup
- Created four end-to-end NLP models to categorize 50M+ people and 20M+ companies for lead prospecting purposes (<5 months)
- Used SOTA LLMs to develop a new SKU for a SF-based client; allowing customers to create personalized sales emails with a single click
- Junior Colleague: "I would probably not be so excited about learning so many different technologies if it were not for Duarte's example"
- Developed the API for a multi-modal search engine for SWE venture firm leveraging 12 different NLP/Audio/Video models
- Lead development, research, and implementation of a carbon stock prediction model using Earth Observation data for UK-based client

DSB - Danske Statsbaner, Machine Learning Engineer - DK

Largest train operating company in Scandinavia. DSB has more than 195 Million passengers every year

- Designed foundation for "ATLAS": data mgmt. framework allowing automated ingestion of large amounts of data
- Built and deployed application that analyzes incidents in railway network, responding to questions from executive board
- Designed and delivered Machine Learning and Al Strategy for 2024 approved by C-level management and board

2020 Boston Consulting Group, Technology Consultant/Architect – DK

Unit within the Boston Consulting Group focusing on Technology. BCG delivered 8.5 Billion USD revenue in 2019

- Lead the analysis of IT infrastructure of a major scandinavian financial institution uncovering +30 USDm in potential savings
- Created 4 mathematical models for migrating critical on-site infrastructure to Public Cloud, using data analysis and Big data tools
- Developed the Cloud adoption Strategy (e.g., AWS, GCP) that paved way for Cloud adoption in a major nordic financial institution

2019-2020 <u>Jabra – GN Audio</u>, Digital Consultant – DK

The fastest growing company in the global professional headset market. 900 Million USD revenue in 2019, with 26% growth

- Coordinated Data and Research in development of an AI based software product, lead pilot in USA office (40+ users)
- Received a manager assessment of 5/5: "Continually receives outstanding feedback from subordinates, peers and customers"

2019 Jabra - GN Audio, Junior Product Manager - DK

- Responsible for all areas (engineering, sales, R&D, biz dev.) of 2 products, 16.000 and 300.000 units sold accordingly in 6 months
- Assisted top management in strategic analyses for M&A activities. Responsible for quarterly board presentation

2017 - 2018<u>Jabra - GN Audio</u>, Student Analyst in Strategy and Business Development - DK

- Reported to the VP of Strategy and Consumer Business
- Developed 5 internal automation tools used by +30 people. By using them, each executive saved more than 4 hours a month

2017 Bliss Applications, Intern - USA

One of the leaders in software development in Portugal. It employs 230 people. It has offices in Portugal, USA, and Brazil

Worked with 3 clients to transform their ideas into viable technology products. Industries: Health, Entertainment and Social Media

2015 - 2016WYGroup, Resident Entrepreneur - PT

WYGroup is one of the leading players for digital marketing and technology services in Portugal, and has been for the last 16 years

Co-Founder and creator of eGuru. A start-up that focuses on crowdsourced deliveries and that raised 150K in funding

SKILLS

Speaking/Writing Writer with avg. 2K/month pageviews. PyCon keynote speaker. Appearances in podcasts and blogs. See talks.

Python, C++, Rust, Javascript, Go. OOP, TDD, Low Latency, Distributed systems Software

ML/Data Pipelines, Network Analysis, Machine Learning/ Deep Learning, MLOps, Software Engineering, System Design Areas

Git, Linux, Fast API, Django, Node.js, MongoDB, SQL, PostgreSQL, Graph QL, Restful APIS, Async, Docker, CI, AWS, GCP, Azure Technologies

Portuguese - Native; English - Fluent; French - Fluent; Spanish - Very Good User; Italian - Very Good User; Chinese - Basic Languages

EDUCATION

2016 - 2018<u>Technical University of Denmark, Master in Engineering Management – DK</u>

- Technology Management, Big Data, Social Graphs, Machine Learning. Final degree average grade of 10/12 (4.0 GPA)
- Thesis: "The uniqueness of technological capabilities: a data-driven network exploration", grade of 12/12 (Paper published)

2015 - 2016Beijing Institute of Technology - CN

Electrical Engineering studies, including subjects about Digital Logic Circuits, CPU, and Computer Controlled Systems

2011 - 2015Instituto Superior Técnico, Bachelor in Engineering Sciences - PT

Finished among the top 30% of the class. Grade of 19/20 in the final project of the Computer and Programming class (Best of class)

HOBBIES

- Visited over 80 different countries in the world
- Marathon runner, 5 marathons and 5 ½ marathons ran