DUARTE O.CARMO

Based in Copenhagen Denmark, available Globally Last updated: September 2025

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EXPERIENCE

2022

DOC Technology, Consultant - AI/ML & Software Engineering - Denmark

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

- Planned, designed and led drug adverse event and compliance detection LLM based system allowing a cut in risk review times of 50%
- LLM/ML lead engineer for Pharma client: created LLM agent that automates dev. support, data pipeline incidents, and code reviews
- Key technical advisor: Danish startup in LLM/Privacy space, Danish Pharma/Cosmetics startup, Brazilian Legal Tech startup
- Scaled LLM-powered insights dashboard from 100 to 20K global users, driving pharmaceutical sales team efficiency worldwide
- Grew and mentored cross-functional team from 2 to 15 people at Fortune 500 pharma client (mentoring, leading, hiring)
- Helped the infrastructure team of a multinational Pharmaceutical company migrate its infrastructure to IaC w. AWS CDK
- Built the first version of a probabilistic soil carbon model, validated against established methods, built satellite based data pipelines
- Engineered automated farm stratification and core allocation system, cutting time to process a single client by 50%
- Lead benchmarking exercise for several satellite based carbon stock models, allowing client to gain clarity on competitive landscape
- Spearheaded R&D for SOTA carbon stock segmentation model using Satellite Imagery for UK-based climate tech startup
- Built LLM-powered text interface for an AR product configurator in 3 weeks resulting in an even more personalized experience
- Developed the API for a multi-modal search engine (12 NLP/Audio/Video models) to facilitate internal resource search for employees
- Mentee feedback: "I would not be so excited about learning so many different technologies if it were not for Duarte's example" Used SOTA LLMs to build a system allowing SDRs to create hyper personalized sales emails based on LinkedIn activity with a single click
- Created four end-to-end NLP models to categorize 50M+ people and 20M+ companies for lead prospecting purposes (<5 months)
- 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
- Created an efficient similarity search engine for over 200K pharmaceutical drugs for a Denmark-based startup
- 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

2021

DSB - Danske Statsbaner, Machine Learning Engineer - Denmark

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

- Designed foundation for "ATLAS": data management 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 – Denmark

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 +30m USD 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

2017-2020

Jabra - GN Audio, Product Manager, Digital Consultant, and Student Analyst in Strategy - Denmark

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 Al 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"
- 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
- Reported to the VP of Strategy and Consumer Business as a student assistant in the Strategy Dept.
- Built 5 internal automation tools used by +30 people. By using them, each executive saved more than 4 hours a month

2015 - 2017

WYGroup, Resident Entrepreneur (Portugal) and Intern (USA)

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
- Interned in Boston w. Bliss Applications and drove projects for clients in areas of Health, Entertainment, and Social Media

LEADERSHIP/SPEAKING

- Guest lecturer for the DTU MLOps course and DIS University in topics such as MLOps, Machine Learning, and Data Science
- 10+ conference talks in conferences related to Data/ML/Software across Europe; Appearance in multiple podcast interviews (talks)
- Writer with avg. 2K/month pageviews. Newsletter author with 50+ published issues.
- Lead workshop focused on pioneering Chinese Large Language Model DeepSeek for Packt Publishing
- Reviewer & author for leading technology publications such as Manning and Pack

SKILLS

- Software: Python, Go, Rust, Javascript, C++. OOP, TDD, Low Latency, Distributed systems, Data Intensive Applications
- Experience with LLMs, ML/Data Pipelines, Satellite Imagery, Data Science/Machine Learning/Deep Learning, MLOps
- Very familiar with Git, Linux, Fast API, Django, Node.js, PostgreSQL, Async, Docker, CI, AWS, GCP, Azure, Vector DB
- Native in Portuguese. Fluent in English, French, and Italian. Very good in Spanish. Very basic Chinese

EDUCATION

- Master in Engineering and Management from the Technical University of Denmark (final grade of 10/12 4.0 GPA)
- Thesis: "The uniqueness of technological capabilities: a data-driven network exploration", grade of 12/12 (Paper published)
- Electrical engineering studies in the Beijing Institute of Technology (Digital Logic Circuits, CPU, Computer Controlled Systems)
- Bachelor in Engineering Sciences from the Instituto Superior Tecnico (top 30% of class 19/20 in Computer and Programming)

HOBBIES

Visited over 83 different countries in the world; Marathon runner, 10 marathons and 10 half-marathons ran