

DUARTE O.CARMO

Based in Denmark, available Globally

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[LinkedIn](#) - [GitHub](#)

EXPERIENCE

- 2022 [Self-employed](#), Technology Consultant - DK
Helping startups and established companies solving challenging problems with Machine Learning, Data, and Software Engineering
- 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
 - Engineered automated farm stratification and core allocation system, cutting time to process a single client in 50%
 - 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 San F. 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 AI 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
- 2019-2020 [Jabra – GN Audio](#), Product Manager & Digital Consultant – 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 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"
 - 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 [Jabra – GN Audio](#), Student Analyst in Strategy and Business Development – Denmark
- 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 – 2016 [WYGroup](#), Resident Entrepreneur – Portugal
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

Software	Python, Go, Rust, Javascript, C++. OOP, TDD, Low Latency, Distributed systems, Data Intensive Applications
Expertise	LLMs, ML/Data Pipelines, Network Analysis, Data Science/Machine Learning/Deep Learning, MLOps, Software Engineering, System Design
Technologies	Git, Linux, Fast API, Django, Node.js, MongoDB, SQL, PostgreSQL, Graph QL, Restful APIS, Async, Docker, CI, AWS, GCP, Azure, Vector DBs
Languages	Portuguese – Native; English – Fluent; French – Fluent; Italian - Fluent; Spanish – Very Good User; Chinese – Basic
Teaching	Guest lecturer for the DTU MLOps course and DIS University
Speaking	>10 conference talks in Data/ML/Software conferences. Podcast interviews. See talks . Writer with avg. 2K/month pageviews.

EDUCATION

- 2016 – 2018 [Technical University of Denmark, Master in Engineering Management](#) – Denmark
- 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 – 2016 [Beijing Institute of Technology](#) – China
- Electrical Engineering studies, including subjects about Digital Logic Circuits, CPU, and Computer Controlled Systems
- 2011 – 2015 [Instituto Superior Técnico, Bachelor in Engineering Sciences](#) – Portugal
- 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 83 different countries in the world; Marathon runner, 10 marathons and 10 half-marathons ran