

## DUARTE O.CARMO

From Portugal, based in Denmark, available Globally  
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## EXPERIENCE

- 2022 [Self-employed](#), Technology Consultant - DK  
*Helping startups and established companies solving challenging problems with Machine Learning, Data, and Software Engineering*
- Driving development of a next-gen insights dashboard for healthcare professionals powered by LLMs at a Swiss pharma client
  - Helped the infrastructure team of a multinational Pharmaceutical company migrate its infrastructure to IaC w. AWS CDK
  - Lead R&D for a SOTA carbon stock segmentation model based on Satellite Imagery and Deep learning for a UK-based client
  - Developed 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 - DK  
*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 – 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 +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](#), 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 [Jabra – GN Audio](#), 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 – 2016 [WYGroup](#), 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

Software	Python, Rust, Javascript, Golang, C++. OOP, TDD, Low Latency, Distributed systems
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
Languages	Portuguese – Native; English – Fluent; French – Fluent; Italian - Fluent; Spanish – Very Good User; Chinese – Basic
Teaching	Guest lecturer for the <a href="#">DTU MLOps course</a> and <a href="#">DIS University</a>
Speaking/Writing	3x PyCon/PyData speaker. Appearances in podcasts and blogs. See <a href="#">talks</a> . <a href="#">Writer</a> with avg. 2K/month pageviews.

## EDUCATION

- 2016 – 2018 [Technical University of Denmark, Master in Engineering Management](#) – DK
- 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](#) – CN
- Electrical Engineering studies, including subjects about Digital Logic Circuits, CPU, and Computer Controlled Systems
- 2011 – 2015 [Instituto 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 82 different countries in the world
- Marathon runner, 10 marathons and 10 half-marathons ran