



INESSA DUC

DATA & AI SPECIALIST

PROFILE

Data and AI specialist with 10+ years of cross-industry experience in business analytics and data-driven decision-making. Strong foundation in stakeholder and performance management, recently expanded with advanced machine learning and applied AI through an MSc in Business Analytics at UCL, a top 10 world university. Combines technical depth with business acumen to ensure data initiatives are not just built but adopted and sustained.

CONTACT



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<https://databyinessa.com/>



Swiss Residence Permit B

LANGUAGES

Portuguese (Native)

English (Full Professional Proficiency)

German (Limited Working Proficiency)

AREAS OF EXPERTISE

Data Science & Advanced Analytics

- Supervised and unsupervised machine learning
- Predictive modelling, model evaluation and benchmarking
- Causal inference and experimental design
- Agentic AI system architecture with multi-source data integration
- Prompt engineering and applied generative AI

Business Performance Analytics

- Executive reporting and data storytelling
- Dashboard development and delivery of data literacy training
- Workshop development and facilitation for data adoption
- Cross-functional project coordination for performance initiatives
- KPI design and performance measurement system implementation

Operations Analytics

- Demand planning and S&OP for purchasing and capacity planning
- Procurement decisions at scale (5,000 SKUs, 1,600 stores)
- Sales and Operations Planning (S&OP), ABC Analysis, Newsvendor Model and inventory optimisation
- Supplier development, negotiation and fill rate improvement
- Process improvement and root cause analysis using Lean Six Sigma, Kaizen, DMAIC and BPMN

PROFESSIONAL EXPERIENCE

Data Scientist (Dissertation Project)

May 2026 - Aug 2026

Marks and Spencer, UK | Retail

- Developed predictive ML models on large-scale data, narrowing 700+ predictors to 20 key drivers of food waste, explaining 79% of variation.
- Deployed a proof-of-concept chatbot in Microsoft Copilot Studio, surfacing model outputs so supply chain and store teams could query food-waste drivers and recommendations through natural language.

Corporate Performance Lead

Abr 2024 - May 2025

Performance Consultant

Sep 2022 - Apr 2024

Ipiranga Produtos de Petroleo S.A., Brazil | Oil & Gas

- Worked with corporate teams to improve how performance was defined, measured and managed, guiding leaders to translate strategic priorities into clear, measurable goals.
- Restructured variable compensation plan by analysing 15,000 text-based employee goal statements, increasing alignment with C-suite objectives from 50% to 80%.

TECHNICAL SKILLS

Programming & Platforms:

Python, R, SQL, NoSQL, Spark, Power BI, MS Excel, Databricks, SAP

Data Science & Advanced Analytics:

Supervised and Unsupervised Learning, Causal Inference, Predictive Modelling, A/B Testing, Difference-in-Differences, Synthetic Control, Matching, Agentic AI, LangChain, Prompt Engineering, Model Context Protocol (MCP)

Operations Analytics:

S&OP, MRP, Newsvendor Model, ABC Analysis, SAP Materials Management, Lean Six Sigma, Kaizen, DMAIC, Value Stream Mapping, 5S, OKR

Certifications:

Google Data Analytics Professional Certificate, Lean Six Sigma Green Belt Certificate

SOFT SKILLS

Problem Framing
Stakeholder Management
Cross-functional Collaboration
Change Management
Executive Communication
Analytical Thinking
Continuous Improvement Mindset

Performance Consultant

Dec 2020 - Sep 2022

Rede D'Or Sao Luiz S.A.,Brazil | Healthcare

- Led performance improvement initiatives in the hospital billing chain, working across clinical, commercial, operations and technology teams to drive data adoption and process efficiency.
- Designed and delivered a performance management workshop for 100+ nurses, combining internal best practices and live dashboard training, with 97% participant satisfaction.

Demand Planning Lead

Jun 2018 - Dec 2020

Procurement Analyst

Jun 2017 - Jun 2018

Graduate Trainee

Jan 2016 - Jun 2017

Americanas S.A., Brazil | Retail

- Selected from over 15,000 applicants for a Graduate Scheme combining frontline store operations, senior mentorship and strategic projects, building the foundation for the analytics roles that followed.
- Led demand planning and purchasing decisions for more than 5,000 SKUs across 10 distribution centres and 1,600 stores, using sales, inventory and supplier data to balance availability and capital allocation.
- Initiated and drove a Lean Six Sigma project with cross-functional teams, applying statistical analysis and root cause techniques to raise supplier fill rates, reducing the gap by 85%.

Operations Planning Analyst

Aug 2014 - Jan 2016

MRS Logistica S.A., Brazil | Rail Transportation

- Managed preventive maintenance planning and monitored equipment availability and productivity across the rail network.
- Improved production reporting across 200 railway assets by mobilising and training operational teams on accurate data entry, reducing input errors by 95%.

EDUCATION

MSc Business Analytics

2025 - 2026

University College London (UCL), UK

- Applied AI projects: development of a LangChain web application for industry report generation and an agentic system for sourcing risk assessment through natural language queries
- Predictive modeling: design and evaluation of multiple machine learning models, from logistic regression to Neural Networks and XGBoost

BSc Industrial Engineering

2009 - 2014

Federal University of Juiz de Fora, Brazil