Kelly Christine Alvarenga de Castro

📍 Curitiba - Brazil EU Citizen

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SUMMARY

I ask data the right questions to turn raw numbers into strategic decisions.

I work seamlessly across descriptive and inferential analysis, statistical modeling, Business Intelligence and data product development. My solid background in software engineering informs my CI/CD practices and enables me to contribute smoothly to Agile teams.

My expertise encompasses time-series analysis, classical machine learning, deep learning and large language models (LLMs), as well as complex interactive visualizations built with React and d3.js. For more than 3 years I've worked with Microsoft Azure cloud services (including ADF, Databricks, Azure ML and Power BI) while specializing in SQL query optimization and advanced Python programming using frameworks such as Flask, FastAPI, scikit-learn, PyTorch and Streamlit.

Since 2015 I have been immersed in the open-source and startup ecosystems, collaborating with high-performing, cross-functional teams. Over the past 3 years I have contributed to data teams in complex industrial settings, focusing on anomaly-detection systems, recommendation engines and computer-vision projects: boosting operational efficiency, advancing Industry 4.0 initiatives and delivering measurable profits.

OBJECTIVE: Data Analyst

LANGUAGES

Portuguese: Native

English (US): Intermediate/Upper B2

EDUCATION

MBA in Data Science | Universidade de São Paulo, São Carlos, Brazil | 2024 - 2025 Postgraduate Specialization in Big Data & Data Engineering | Universidade de São Paulo, São Paulo, Brazil | 2023 - 2024 Software Engineering BEng | Centro Universitário Internacional UNINTER, Curitiba, Brazil | 2021 - 2025 BA Performing Arts | Universidade Federal de Ouro Preto, Ouro Preto, Brazil | 2001 - 2006

PROFESSIONAL EXPERIENCE

Mid-level Data Analyst | MBRF COE - Center of Excellence in Advanced Analytics | Curitiba, Brazil | Sep 2025 - Present

Developed a proof of concept to validate and build a convolutional neural network (CNN) on top of Meta's Segment Anything Model 2 (SAM 2) for automated animal counting in agribusiness. Leveraging SAM 2's higher segmentation accuracy and 6× faster inference speed, which reduces human interactions by threefold, the PoC delivered >95 % counting accuracy, processed video streams in real time, and cut manual counting time by 80 %. Key KPIs included mean average precision (mAP), frame-per-second throughput, and reduction in human interventions.

Data Engineering Analyst | SLB - OneSubsea | São José dos Pinhais, Brazil | May 2024 - Sep 2025

- Designed and maintained ETL/ELT pipelines in Databricks, Spark and Azure Data Factory, ensuring scalability and governance.
- Built interactive Power BI dashboards with advanced DAX, semantic models, incremental refresh, and deployment pipelines, improving KPI monitoring and strategic decisions.
- Delivered an end-to-end Quality Notification (NCR) solution, increasing operational efficiency by 15% and reducing SLA breaches by 20%.
- Led the Data Governance team for Brazil operations, ensuring compliance with privacy, sharing, and quality principles.
- Collaborated with BI, engineering and business teams to resolve governance and data quality challenges.
- Developed predictive analytics models for non-conformity treatment using Azure ML.

- Achieved ISO 50001 certification by designing data monitoring systems for energy efficiency.
 - ✓ Achievement: Finalist, Petrobras Data Science Hackathon: integrating two open-source projects (BibMon + 3W dataset).

Digital Transformation Intern | SLB - OneSubsea | São José dos Pinhais, Brazil | Jan 2023 - May 2024

- Automated management reporting with Python and SQL query optimization, cutting report generation time by 50%
- Designed and deployed Power BI dashboards for real-time KPI monitoring.
- Supported Data Governance initiatives and data quality frameworks.
 - ✓ Achievement: Finalist, iUP Inovathon (OTC 2023), led to publication "Impact of Adopting an Integrated Marketplace for the Oil and Gas Industry on the Dynamics of Green Bonds and Environmental Financial Assets Market" at ROG.e 2024 Conference.

Front-End Developer | Contraktor Tecnologia S/A | Curitiba, Brazil | Jan 2022 - Aug 2022

- Redesigned and internationalized the corporate website using WordPress, JavaScript and React, embedding robust tracking to measure user engagement across markets.
- Designed, executed and analysed A/B tests and data-driven growth experiments with Google Optimize, yielding a 15 % conversion uplift and informing product decisions.
- Developed dashboards to monitor SEO performance, page-speed metrics and user behaviour; partnered with marketing and engineering teams to identify trends, prioritise insights and drive optimization initiatives.

Full Stack Engineer | Mestres Ninja Internet | Curitiba, Brazil | Jul 2017 - Oct 2021

- Developed and maintained web and e-commerce solutions for a variety of clients, integrating analytics instrumentation to measure key metrics such as traffic, conversion rate and revenue.
- Delivered Buzz Editora's e-commerce platform, including payment gateway integration and performance tracking, enabling data-driven insights into customer behaviour.
- Built a secure and scalable REST API for a financial-sector client, capturing usage metrics and supporting data-driven decision-making.
- Leveraged tools like Google Search Console to monitor SEO, diagnose performance issues and provide data-driven recommendations.
- Collaborated with cross-functional teams and clients to define requirements, translate business needs into technical solutions and present findings through clear documentation and dashboards.
 - ✓ Finalist Generation Entrepreneur 2017 (Challenge Paraná Entrepreneurial Alliance)
 - ✓ Startup & Makers Campus Party Brazil 2017
 - ✓ Mentor Idea Review Curitiba Virtual Winter 2020 | Founder Institute

Marketing Manager | Encontre um Nerd S/A | Curitiba, Brazil | Sep 2015 - Aug 2016

- Led strategic marketing and communication initiatives as CMO and co-founder during the company's acceleration at ACE (2016), one of Latin America's top accelerators. Oversaw brand positioning, content, inbound marketing, and PR. Built and managed a national community of over 10,000 IT freelancers ("Nerds"). Secured a partnership with Algar Telecom and co-created the "Universidade Nerd" with Certbest to deliver professional training and IT certifications. Recognized by FGV and Endeavor Brazil as a top startup (Startup of the Year finalist and Promises 2016 by J.P. Morgan Foundation).
 - ✓ Startup of the Year 2015 Challenge Brazil 10th edition / FGV EAESP.
 - ✔ Promises 2016 JPMorgan Chase Foundation / Endeavor Brazil / J.P.Morgan

TECHNICAL SKILLS

- Languages & Scripting: Advanced proficiency in Python and SQL—comfortable writing complex queries and building statistical models for high-volume data analysis.
- Analytics & Machine Learning: Skilled with scikit-learn, PyTorch and TensorFlow; experience with PCA and feature engineering to discover patterns in behavioural data; familiar with designing and evaluating A/B tests and experiments using Python's statistical libraries.
- Data Visualization & Reporting: Advanced Power BI user (DAX, semantic models, pipelines), capable of crafting clean, intuitive dashboards and reports that translate data into actionable insights for both technical and non-technical stakeholders.

- Data Engineering & Big Data: Proficient with Databricks, Spark and Azure Data Factory; adept at building and managing ETL/ELT pipelines in Data Lakes to support analysis across large, multi-channel datasets.
- **Cloud & ML Services:** Expertise in Microsoft Azure, including Azure ML services; experience deploying models and analytical workloads at scale and working with streaming or large datasets.
- **DevOps & Collaboration:** Hands-on with Azure DevOps, CI/CD, Docker, Kubernetes and GitHub to ensure reproducible, maintainable workflows; promotes Agile and DevSecOps best practices.
- **Methodologies:** Comfortable working in Agile, Scrum and Kanban environments; experienced in cross-functional collaboration and communicating findings effectively to leadership and partner teams.

CERTIFICATIONS

- Advanced Topics in Business Strategy | <u>University of La Verne</u>, La Verne, USA | Jan 2025
- Advanced Business English | <u>University of La Verne</u>, La Verne, USA | *Jan 2025*
- Innovation Management | <u>Universidade Federal do Paraná</u>, Curitiba, Brazil | May 2023
- Software Testing | Universidade Federal de Minas Gerais, Belo Horizonte, Brazil | Mar 2023

COMMUNITY & VOLUNTEER

- Member <u>Brazilian Computer Society (SBC)</u> since 2021.
- Contributor Petrobras Open-Source 3W Dataset project.
- Member Open Source WordPress Community since 2016.
- Associated Women in Data Science (WiDS) USP & Women in Data (WiD).
- Leader LGBTQIAP+ Committee, <u>SLB OneSubsea</u> (2025).

References Upon Requests