

João Eduardo Reis
Machine Learning Practitioner (PhD, Mathematics)
Gold Coast, QLD — [Portfolio](#) — [GitHub](#) — [LinkedIn](#)

Independent Projects (2025–2026)

- **ML Deployment Platform.** Built an end-to-end Machine Learning Deployment Platform integrating automated data ingestion, multi-model forecasting, backtesting, and daily CI/CD pipelines. Delivered two live dashboards (Market & Forecasts) through a Django web interface and designed the system to easily incorporate new Python and R models. (Django, Supabase/PostgreSQL, SQL, GitHub Actions, Render.) [Project Page](#).
- **Data Observability Platform.** Built a production-style data observability platform for data monitoring, using an ELT pipeline into a PostgreSQL data warehouse with a star/dimensional model, automated data-quality and freshness checks, and anomaly detection for alerting and incident management. Dashboards run on secure database views with Row-Level Security and least-privilege role-based access control. (Django, Supabase/PostgreSQL, SQL, GitHub Actions, Render.) [Project Page](#).

Capstone Projects (MIT-IDSS, 2025)

- **Amazon Product Recommender.** Built a recommendation engine to predict products users may like based on past behaviour. (Collaborative Filtering, Matrix Factorisation | Streamlit App.) [Project Page](#).
- **Lead Conversion Prediction.** Developed a model to identify leads most likely to convert into paying customers. (Logistic Regression, Random Forest, Gradient Boosting.) [Project Page](#).
- **Customer Personality Segmentation.** Performed customer segmentation based on purchasing behaviour and demographic traits. (K-Means, Agglomerative Clustering, Gaussian Mixture Models.) [Project Page](#).

Education & Certifications

- **Massachusetts Institute of Technology (MIT), IDSS (2025):** Data Science and Machine Learning: Making Data-Driven Decisions. [View Certificate](#).
- **Mindroom Innovation (2024–Present):** Diploma in Database Management.
- **IT Courses (Mindroom Innovation):**
 - Integrate Databases with Websites (HTML, PHP, SQL, phpMyAdmin).
 - Create and Develop REST APIs (Django).
- **Kaggle:** Data Science and Machine Learning courses. [View Certificates](#)
- **Federal University of Rio de Janeiro (2011–2013):** Postdoctoral Researcher in Mathematics.
- **Federal University of Rio de Janeiro (2006–2011):** PhD in Mathematics.
- **Federal University of Goiás (2004–2006):** Master's in Mathematics.
- **Federal University of Goiás (2000–2003):** Bachelor's in Mathematics.

Technical Exposure

- **Programming Languages:** Python, R, SQL, PHP, HTML/CSS.
- **Data Science & Machine Learning:** EDA, Statistical Testing, Regression, Classification, Clustering, Time-Series Forecasting.
- **Frameworks & Tools:** Django, Supabase (PostgreSQL), Streamlit Apps, GitHub Actions, Render, phpMyAdmin, Power Query, Power BI.

Additional Information

- **Research-Oriented:** Scientific publication in an indexed mathematics journal. [Publication Link](#).
- **Mentoring:** Supervised a final-year undergraduate thesis. [Thesis PDF](#).

Work Experience

- **Cluey Learning (Australia, 2023–2024):** Mathematics Tutor (Years 6–9, online).
- **Federal University of Catalão (Brazil, 2019–2021):** Substitute Lecturer (Calculus, Statistics).
- **Pontifical Catholic University of Goiás (Brazil, 2014–2019):** Lecturer (Algebra, Calculus, Geometry, Differential Equations, Statistics).