Erika Chang de Azevedo, Ph.D. - Data Scientist | Data Analyst

Amsterdam, Netherlands (NL residence permit) | LinkedIn: linkedin.com/in/ecdazevedo | GitHub: github.com/erika-chang

SUMMARY

Data Scientist with a PhD in Biomolecular Physics who turns complex data into measurable business value. I design predictive models, automated ETL pipelines, and GenAI applications that make decisions faster, more reliable, and easier to act on. Recognized for combining scientific rigor with data storytelling—bridging the gap between technical insight and strategic impact.

SKILLS

Programming & ML: Python (pandas, scikit-learn, TensorFlow, LangChain, Hugging Face) | SQL (PostgreSQL, SQLAlchemy)

Data Engineering & MLOps: ETL pipelines | FastAPI | Docker | MLflow | Vertex AI | CI/CD | Git

Visualization & BI Tools: Tableau | Power BI | Streamlit | matplotlib | seaborn

Business & Soft Skills: Data storytelling | Stakeholder communication | Analytical thinking | Mentoring | Agile collaboration

PROFESSIONAL EXPERIENCE

Tiprev   **Remote**
Data Scientist   *07/2023 - Present*
- Automated pension-data workflows in Python and SQL, improving consistency and visibility across municipal datasets.
- Developed machine-learning models to flag anomalies and support proactive financial-risk management.
- Built interactive Tableau dashboards that enable municipal leaders to monitor pension health and inform long-term planning.
- Partnered with audit and compliance teams to align data processes with national oversight standards.

Le Wagon   **Remote**
Data Science and AI Bootcamp   *01/2025 - 03/2025*
- Created Eyesense, a deep-learning app for early eye-disease detection using TensorFlow/Keras and Streamlit.
- Implemented predictive-modeling pipelines with reproducible, scalable ML workflows.
- Delivered technical insights to non-technical peers in Agile sprints, emphasizing clarity and business relevance.

E. E. Governador Jânio Quadros   **Corumbataí, São Paulo, Brazil**
High School Teacher   *04/2021 - 03/2023*
- Applied data-driven methods to evaluate student performance and guide teaching strategy.
- Led professional-development workshops on technology-enhanced, evidence-based learning.

University of São Paulo   **São Carlos, São Paulo, Brazil**
Senior Research Scientist   *02/2015 - 05/2020*
- Designed predictive bioinformatics models on GPU clusters, accelerating molecular simulations and discovery cycles.
- Published peer-reviewed papers translating complex data into actionable insights for cross-disciplinary research.
- Mentored researchers on analytics, visualization, and reproducible workflows, strengthening team data literacy.

PROJECTS

SecureMed Chat | *GenAI, FastAPI, Vertex AI, ChromaDB (GCP)*
Developed a privacy-first RAG chatbot for medical intake using zero-persistence architecture—ensuring GDPR compliance and scalable cloud deployment.

Eyesense | *TensorFlow/Keras, Streamlit, GCP*
Built and deployed a deep-learning model for eye-disease prediction with an emphasis on explainability and healthcare impact.

ETL Pipeline | *Python, SQLAlchemy, Docker, PostgreSQL*
Created an end-to-end data pipeline transforming raw sales data into analytics-ready tables for BI dashboards.

EDUCATION

LeWagon - *Data science & AI*
University of São Paulo - *Ph.D. in Biomolecular Physics*
University of São Paulo - *Master's degree in Biomolecular Physics*

LANGUAGES

Portuguese – native | English – fluent | Dutch – intermediate (willing to improve) | Spanish – basic