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Specialist in Data Engineering and Analysis • Solutions and Strategy
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Professional Summary

Experienced professional in data engineering and analysis, working on high-impact projects involving data processing, modeling, integration, and interpretation to support decision-making. Strong experience in the supplementary health sector, with background in medical audit, hospital efficiency, cloud cost reduction, and development of analytical solutions in Python and SQL.

Proven ability to structure processes, optimize information flows, and transform business needs into consistent and scalable analytical products. Experience in technical leadership, supporting multidisciplinary teams, and driving strategic initiatives with a high level of autonomy.

Key Skills

- Python (Streamlit, Pandas, PySpark, SQLAlchemy, scikit-learn)
- SQL (Oracle, AWS Athena)
- Cloud environments (AWS)
- Docker, pipelines, data integration
- Data visualization (Metabase, Power BI, Qlik Sense, Tableau)
- Best practices: error handling, logging, versioning, testing
- Technical documentation and process design

Professional Experience

Commercial Performance Supervisor – Unimed-BH

May/2025 – November/2025 · Belo Horizonte/Minas Gerais

- Technical leadership and support for the Analysis and Performance team, ensuring generation, consistency, and delivery of strategic information to the cooperative's commercial area.

Key achievements:

- Led the team (6 analysts) in producing analyses and studies for prospecting and maintaining the client portfolio, using Python, SQL and Excel as technical tools.
- Developed queries and analytical models integrating different data sources, accelerating commercial decision-making.
- Produced strategic studies for the superintendency, identifying financial patterns, revenue opportunities, and portfolio behaviors.
- Structured advanced analyses using Python connected to multiple sources, improving result accuracy and depth.

Clinical Data Analyst – Unimed-BH

June/2023 – May/2025 · Belo Horizonte/Minas Gerais

- Responsible for clinical data analyses, hospital efficiency studies, medical bill auditing, and evaluation of internal hospital processes.

Key achievements:

- Performed in-depth analyses of hospital processes, extracting critical data on billing, margins, and operational efficiency to support executive decisions.
- Developed a complete Python solution to recommend medical claims with potential improper billing, increasing audit precision and outperforming previous, more complex approaches.
- Identified billing gaps by providers, reviewed system parameterizations, and highlighted relevant financial risks.
- Structured data for critical processes, generating insights on appointment availability and helping leadership define strategies for physicians and clients.
- Acted as a technical partner to clinical areas, delivering clear, actionable, business-oriented analyses.

Data Engineer – Unimed-BH

April/2022 – June/2023 · Belo Horizonte/Minas Gerais

- Technical reference in modernizing indicators, automating pipelines, AI governance, and cost management in AWS.

Key achievements:

- Led the migration of critical indicators from Stata to Python running on AWS, reducing computation time and improving operational reliability.
- Documented and standardized model deployment processes for AI, ensuring traceability and governance.
- Reduced Data Lake costs by decommissioning idle servers, implementing storage policies, and creating preventive monitoring routines.
- Developed monitoring metrics for AI models with automatic alerts, ensuring operational continuity.

- Contributed to the AWS Security and Quality team by reviewing access, adjusting structures, and maintaining environment integrity.
- Mentored internal teams in Python and SQL, strengthening the organization's data culture.

Junior Business Intelligence Analyst – Hyperlocal

November/2021 – April/2022 · São Paulo/São Paulo

- Responsible for exploratory analyses, data modeling, automations, and dashboard development.

Key achievements:

- Built dashboards in Tableau and Metabase focused on clarity and visual impact.
- Improved SQL queries for efficient data extraction from the data lake, optimizing performance and execution cost.
- Structured ETL processes to transform raw sources into organized datasets, accelerating internal teams' workflows.
- Identified patterns, trends, and anomalies through exploratory analysis, providing valuable inputs for strategic decisions.

Relevant Projects

Medical Claims Audit Project – Unimed-BH

Developed dashboards and automations for end-to-end monitoring of the hospital claims audit workflow. The project involved data modeling, creation of key indicators, validation routines, and standardization of information, as well as delivering real-time monitoring panels.

Technologies: Python (Streamlit), SQL, Data Quality practices.

Analysis of Attached Documents in Transcription Requests – Unimed-BH

Implemented a solution to analyze documents attached to exam orders to identify possible fraud for auditing and clinical safety purposes. The solution evaluated documents attached to transcribed requests using OCR techniques (AWS Textract) to better direct the team in document review.

Technologies: Python, AWS Textract, AWS S3, SQL.

Hospital Monitoring Center – Unimed-BH

Designed a hospital command center for real-time monitoring of clinical, operational and efficiency indicators. This included KPI definition, thematic categorization, data architecture, executive presentations, and workflow design for rapid decision-making.

Technologies: SQL, Python, indicator modeling methodology, data architecture.

Commercial Monitoring Center – Unimed-BH

Built a centralized environment to monitor commercial metrics such as company results, customer usage profiles, and other business indicators. The project included designing analytical views, integrating internal sources, standardizing metrics, and building real-time dashboards for the commercial area.

Technologies: SQL, Python, Metabase, commercial analysis techniques.

Data Lakehouse with DataSUS – Personal Project

Developed a complete data lakehouse using public DataSUS datasets. The pipeline includes automatic FTP ingestion, validation with Soda Core, optimized storage in PostgreSQL, visualization in Metabase, and containerized execution with Docker.

Technologies: Python, Soda Core, PostgreSQL, Docker, Metabase.

Bed Occupancy Dashboard with Floor Plan – Personal Project

Built a web application to visualize hospital bed occupancy in real time. The system presents an interactive floor plan, dynamic colors based on occupancy, and detailed information on hover, integrated with the hospital database.

Technologies: HTML, CSS, JavaScript, SQL.

Strava Data Consumption – Personal Projectn+

Developed scripts and dashboards to ingest, process, and analyze sports data from the Strava API. The project includes consolidation of workouts, comparative analyses, evolution charts, and personalized insights for endurance and triathlon training.

Technologies: Python, REST API, Pandas, data visualizations.

Education

PhD in Mathematics

Universidade Federal de Minas Gerais (UFMG)
Mar/2020 – Dec/2021

Master's in Mathematics

Universidade Federal de Viçosa (UFV)
Aug/2018 – Feb/2020
Dissertation: Residue formulas for logarithmic foliations and applications
Advisor: Prof. Dr. Diogo da Silva Machado

Bachelor's Degree in Mathematics

Universidade Federal de Ouro Preto (UFOP)
Mar/2014 – Aug/2018
Thesis: Hybrid PSO algorithm with descent directions for many-objective problems
Advisor: Prof. Dr. Thiago Fontes Santos
Co-advisor: Prof. Dr. Sebastião Martins Xavier
Activities and programs: - Science Without Borders program (CSF) **Western Illinois University (WIU)** : *2015 – 2016*
Scholarship recipient under the Science Without Borders program from August/2015 to July/2016. Completed undergraduate and graduate courses and spent the last two months preparing and delivering an introductory Real Analysis workshop, taught entirely in English.
- Undergraduate Research (3 years) - Tutorial Education Program (PET) - Institutional Teaching Incentive Scholarship Program (PIBID)

Languages

- Portuguese – Native
- English – Advanced

Interests

Triathlon, road running, health technology, data engineering, automation, dashboards, and sports performance.