TIAGO COUTINHO

SOFTWARE ENGINEER

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PROFESSIONAL SUMMARY

I'm an AI Data Enginner with strong experience in Python, Django, and high-performance REST API development. In a previous role, I built an AI-powered healthcare application using computer vision and designed ETL pipelines to convert raw data into clinically relevant insights for healthcare professionals.
In my current role, I develop and maintain backend systems, optimizing WebSocket scalability by 4x and reducing CI/CD pipeline times by up to 50%. I'm also responsible for server maintenance, project infrastructure, and CI/CD. I'm a strong team player with solid critical thinking skills, focused on writing reliable, maintainable, and well-documented code.

TECHNICAL SKILLS

Python	REST API	Elasticsearch	CI/CD	ETL
Django	Django Rest Framwork	OpenCV	Linux	Computer Vision

EXPERIENCE

Glintt Global - AI Data Engineer

July 2025 - current

Nonius - Software Engineer

February 2024 - June 2025

- Develop and maintain high-performance APIs using Django and Django REST Framework to support casting services (e.g., Chromecast, AirPlay), handling thousands of daily requests.
- Optimize real-time communication and event propagation, improving the system's capacity to handle 4× more simultaneous WebSocket connections.
- Lead a project responsible for preparing and deploying devices for in-loco use in hotels, hospitals, and healthcare facilities.
- Work across the full data pipeline: from ingesting raw data from customer devices into Elasticsearch, to processing and delivering it efficiently to the end user — applying practical ETL principles.
- Lead performance improvements by optimizing Elasticsearch queries and database operations, achieving up to 80% faster responses on critical endpoints.

Padrão Ortopédico - Software Developer

November 2022 - February 2024

- Developed a Python application to support gait analysis in lower limb amputees, capturing raw data in real time using a YOLO-based computer vision model.
- Built a custom ETL pipeline: from data collection via computer vision, to data processing using Pandas and signal filtering techniques, and finally delivering structured gait assessment results.
- Designed and implemented a custom GUI to present the processed data and improve usability for healthcare professionals.

Padrão Ortopédico (internship) - Biomedical Engineer

February 2022 - July 2022

- Built a Python web app to process gait data and generate assessments of lower limb amputees using input from a third-party tool.

EDUCATION

Master's degree in Biomedical Engineering

2020 - 2022 | Universidade Católica Portuguesa

Bachelor's degree in Bioengineering

2017 - 2020 | Universidade Católica Portuguesa

LANGUAGES

Portuguese - Native English - Proficient Spanish - Intermediate