

LUIZ AUGUSTO FIDALGO

PERSONAL INFORMATION

Location: Marburg, Germany
Contact information: +55 61 99645-0664
Email: luiz.fidalgo@hotmail.com
LinkedIn: [linkedin.com/in/luiz-augusto-fidalgo](https://www.linkedin.com/in/luiz-augusto-fidalgo)
GitHub: github.com/lafigalga
Nationality: Brazilian & Portuguese

Languages: Portuguese (Native), English (C1 - TOEFL 109), German (A2)



PROFESSIONAL EXPERIENCE

Machine Learning Engineer | Hotmart

August 2024 - Present

- Developed and maintained Hotmart's internal AI platform, automating deployment processes to enable Data Scientists to focus on research and model development;
- Built advanced AI applications and architectures with LLMs, RAG, and AI agents, enhancing integration for developers and clients;
- Created automation tools to streamline CI/CD pipelines, utilizing Docker for containerization, Kubernetes (K8s) for orchestration, and Terraform for infrastructure as code, significantly improving deployment efficiency and reducing release times;
- Authored RFCs and documentation to standardize workflows and ensure effective project execution.

Artificial Intelligence Consultant | SnowFox AI

September 2023 - August 2024

- Collaborated with multinational teams to design and develop AI solutions for unstructured data extraction (LLMs, RAG) and high-cardinality object detection and classification;
- Integrated state-of-the-art technologies like GPT-4o, SAM, YOLOv8, and other Foundation Models to enhance AI system performance in real-world applications;
- Architected and implemented cloud infrastructure for MLOps across GCP, AWS, and Azure environments;
- Leveraged Kubernetes and Docker for efficient container orchestration, enabling scalability, flexibility, and resilience in AI deployment pipelines and operational workflows.

Hardware and Firmware Development Intern | GrupoOrion

March 2021 - December 2022

- Contributed to the development of 5 IoT sensor prototypes and supported the production, testing, and installation of over 200 units;
- Worked with microcontrollers and microprocessors such as MSP430, ATMEGA328, ESP32, ESP8266, and Raspberry Pi to develop and optimize hardware solutions;
- Recognized as the company's Outstanding Intern of 2021.

CEO | ENETEC - Junior Enterprise

April 2018 - February 2021

- Led internal strategy adaptation during the pandemic, overseeing 39 team members in 2020;
- Recognized by the Confederation of Junior Enterprises for exceptional project performance and revenue results;
- Previous roles included Marketing Director, Sales Manager, Project Manager, and Consultant.

EDUCATION

Bachelor of Electrical Engineering | University of Brasília (UnB), Brazil

March 2018 - February 2024

- Recognized as one of Brazil's top universities;
- Graduated with honors as the Outstanding Student of my class;
- Final Thesis: Inventory monitoring through weight variation using low power consumption techniques and wireless communication.

International Sandwich Program | University of Rome Tor Vergata, Italy

February 2023 - August 2023

- Participated in a 6-month sandwich program at University of Rome Tor Vergata;
- Attended master's level courses delving into subjects like Internet of Things (IoT), Artificial Intelligence and VLSI;
- Collaborated with multicultural teams, gaining invaluable insights from individuals of diverse nationalities, cultures and backgrounds.

PROJECTS

Machine Learning (ML) | MLOps

August 2024 - August 2024	Knowledge-Based LLM Prototype Context Chatbot <ul style="list-style-type: none">• Objective: Develop a knowledge-based LLM chatbot that answers questions related to specific documents or websites;• Approach: The chatbot was built using a microservices architecture with an interactive UI, ensuring seamless user interaction. A scalable solution was developed using FastAPI, Docker, an open-source vector database, and an LLM framework. Deployment was automated through a CI/CD pipeline integrated with GitHub Actions to streamline updates and ensure efficient delivery;• Impact: Released the solution as an <u>open-source repository</u>, enabling broader adoption and contribution.
	Unstructured Data Extraction Government Contracting Documents <ul style="list-style-type: none">• Objective: Streamline the process of analysis and decision-making in government contracting;• Approach: Developed and deployed a pipeline using Retrieval-Augmented Generation (RAG) and Large Language Models (LLM) to extract information from government contracting documents. Implement the solution on Google Cloud Platform (GCP).
	Object Detection and Classification Supermarkets Products <ul style="list-style-type: none">• Objective: Assist a multinational company in developing a mobile app with Offline Image Recognition functionalities;• Approach: Provide consulting services in Computer Vision, MLOps, and Data Analytics for product detection and classification in supermarkets. Organize and process the large amount of data generated daily by the company's international clients. Implement the solution on Google Cloud Platform (GPC) and Google Kubernetes Engine (GKE).
December 2023 - August 2024	
September 2023 - December 2023	Unstructured Data Extraction Financial Balances <ul style="list-style-type: none">• Objective: Extract financial information from clients balance sheets for one of Brazil's leading insurance companies;• Approach: Developed and deployed a pipeline using Optical Character Recognition (OCR) and Large Language Models (LLM). Implemented the solution on Amazon Web Services (AWS) and Microsoft Azure;• Impact: The solution was successfully integrated into the insurance company infrastructure and has reduced balance sheets analysis costs, time consumed and human errors.

SKILLS

Programming Languages

Python | C | C++

AI & ML Tools

Pandas | Numpy | Scikit-learn | MLflow | LangChain | LLamaIndex | CrewAi

Cloud Platforms

AWS (S3, Lambda, ECR, EKS, SageMaker, DynamoDB)
GCP (Cloud Storage, Cloud Functions, Cloud Run, Vertex AI, GKE)
Azure (Blob Storage, Functions)

Web Frameworks

FastAPI | Flask | Streamlit

Data Visualization

Matplotlib | Plotly

DevOps & Infrastructure

Docker | Terraform | Kubernetes | CI/CD | GitHub Actions

Management

Agile Management | Strategic Planning

Soft Skills

Leadership | Communication | Risk Management | Cross-functional Teamwork | Problem-Solving | Critical Thinking