

# GABRIEL LUCAS DA SILVA

## SKILLS

- Python
  - Software Development
  - ML
  - Azure
  - Robotics
  - Object-oriented programming
- API Development
  - Computer Simulations
  - Computer vision
  - Deep Learning
  - Computer Graphics
  - SQL

## WEBSITES, PORTFOLIOS, PROFILES

- [linkedin.com/in/gabriel-lucas-da-silva](#)

## PROFESSIONAL SUMMARY

Brazilian-based Python Software Engineer with a strong background in Computer Engineering and over two years of hands-on AI experience. Skilled in utilizing advanced technologies such as OpenCV, PyTorch, LangChain, LangGraph, TensorFlow, and Azure to develop and deploy high-performance AI solutions. Successfully brought a project back on track after falling behind schedule for several months by leveraging solid software engineering foundation and ensuring timely delivery. Achieved remarkable results by reducing the margin of error from 30% to 3-5% through implementing new algorithms based on software development experience and utilizing OpenCV and sci-kit-learn for clustering. Excels in fostering client relationships and presenting solutions in a compelling manner that showcases the team's skills and leaves clients eager for the finished project. The objective is to develop solutions that improve the planet and leave a legacy of kindness and hope for future generations.

## WORK HISTORY

### PYTHON BACKEND SOFTWARE ENGINEER 02/2024 to Current Citric Sheep

- Engineered and implemented a high-precision computer vision system for real-time luggage dimensioning using RGBD camera technology on conveyor belts
- The solution dramatically improved measurement accuracy from 30% error margin to 3-5%, delivering a robust and tunable system that became a reliable cornerstone of the operation's automation pipeline
- The architecture leveraged YOLO, SAM, OpenCV, and custom depth-based algorithms for dimensional calculations
- Developed a chatbot system that helped sales representatives take advantage of the company's API and provide data-driven insights
- Designed and developed an agentic workflow using LangGraph and LangChain to orchestrate the LLMs and provide more specific prompts for each chatbot task

### DATA ENGINEER 05/2023 to 02/2024 AI Solutions, Campo Grande - MS, Brazil

- Enhanced and optimized the existing testing for a critical database migration project,

implementing automated solutions and leading the testing to ensure data integrity across complex ETL processes.

- Improvements streamlined validation workflows and reduced manual testing efforts by generalizing test patterns. This enabled faster migration cycles while maintaining high data quality standards and reducing development time by approximately 15%.
- The optimization leveraged SQL for comprehensive data validation, Jinja templating for test automation, and Python for ETL pipeline testing, demonstrating problem-solving solid skills in database migration and test automation.

**FRONTEND SOFTWARE ENGINEER** 01/2020 to 06/2020

**ENGETEC MEDICAL**, Campo Grande - MS, Brazil

- Developed the front end in Flutter for an electronic time-tracking app.
- Collaborative team environment.
- Implemented five pages in 2 months.
- Developed scalable and maintainable code, ensuring long-term stability of the software.

**EDUCATION**

**Instituto De Ciências Matemáticas E De Computação (ICMC) - USP**, São Paulo - SP, Brazil

**Master of Science**, Computer Graphics, Expected in 01/2025

As part of my Master's in Computer Science and Applied Mathematics, I am working on developing a smoke simulation using the RBF-FD technique. This technique leverages radial basis functions to discretize the partial differential equations governing smoke behavior, allowing for more accurate and efficient simulations. Smoke simulation is an important area in computer graphics, used in games, movies, and other visual applications. I am excited to contribute to advancements in this field and look forward to sharing my results soon.

**Universidade Federal De Mato Grosso Do Sul**, Campo Grande - MS, Brazil

**Bachelor of Science - BS**, Computer Engineering, 01/2021

As a Computer Engineer, I specialize in designing, developing, and implementing hardware and software solutions across various applications. With expertise in programming, embedded systems, computer networks, and artificial intelligence, I am equipped to create innovative solutions to complex problems. My background in Computer Engineering has given me a solid understanding of fundamental principles in electronics, computer architecture, and algorithms. I have also developed data analysis and mathematical modeling skills, enabling me to make informed, evidence-based decisions.

**CERTIFICATIONS**

- LARC/CBR-2018 IEEE Standard Education Kits - IEEE
- LARC/CBR-2019 @home - IEEE
- Scrum Foundation Professional Certificate(SFPC) - Certiprof
- Front-end Development with React - Coursera
- Applying SOLID Principles in practice - Udemy

**LANGUAGES**

English

Bilingual or Proficient (C2)

Portuguese

Bilingual or Proficient (C2)