# Mariano Crosetti

Computer Science (Msc. equivalent) | Argentinian - Italian

LinkedIn | Website | GitHub | Email

## ABOUT ME

I'm a machine learning engineer specializing in deep learning with expertise in shipping solutions to real-world problems (founder experience). I excel in technically complex projects where pushing the boundaries of what's possible and practical with AI is essential.

## EXPERIENCE

**Machine Learning Engineer**                                                                                   *Santa Clara, CA*
*QuarkAI*                                                                                                       *2022 - Present*
- When ChatGPT API was released, I took the initiative and integrated it in a single weekend, adapting the stack: data pipeline, databases, search engine, and frontend. It was critical to maintain all the clients.
- Integrated computer vision models in PyTorch fine-tuned to recognize blueprint semantic content: pivotal feature in securing a $300K/year client.
- Saved $60K/year using model distillation (PEFT, LLaMA, QLoRA) in our most frequent LLMs usages.
- Technical consultant in client-facing meetings, accounts exceeding $300K/year, advising sales and product teams on feasible solutions, timelines, and implementation strategies.
- Led the implementation of middleware infrastructure for caching queries, automating dataset creation, freeing up an engineer in charge of that task for higher-priority projects.

**Co-Founder - Tech Director**                                                                                  *Argentina*
*Ventilemos (IoT solutions for controlling air quality)*                                                        *2020 - 2022*
- Trusted by +25 Multinational Companies, +30 Research Institutes, and +15 Government Institutions.
- Reduced capital risk to near zero, maintaining volume: delivered a prototype in 3 weeks, validated PMF, secured hundreds of early orders, and finally launched the product in just 1.5 months.
- Outsourced the production, scaling it to 1000 units/month while maintaining capital efficiency.

**Machine Learning Engineer Consultant | Computer Vision**                                                      *Argentina*
*"Santa Fe Electoral System"*                                                                                   *2020 - 2021*
- Implemented safe and fast signature recognition and OCR in an Android app used in National elections.

**Software Engineering Intern (Google Stadia)**                                                                 *Mountain View, California*
*Google Inc*                                                                                                    *January 2018 - April 2018*
- Got superb review, getting a full-time offer.

**Machine Learning Engineer | NLP**                                                                             *Argentina*
*Brightsector Algorithms*                                                                                       *2018 - 2020*
- Implemented the automatic attribute extraction for MercadoLibre (LATAM's largest e-commerce).

**Software Engineering Intern (Google Codejam)**                                                                *San Francisco, California*
*Google Inc*                                                                                                    *June 2017 - September 2017*

## SKILLS

**Programming Languages & Frameworks:** C/C++, Python, JavaScript, Java, NodeJS, Flask, Django
**Databases & Infraestracture:** SQL, Qdrant, Solr, MongoDB, Airflow, AWS, GCP, Docker, Docker Swarm
**Deep Learning & NLP:** CUDA, PyTorch, Hugging Face Transformers, LLM Fine-Tuning, ViT, YOLO, MAE, Stable Diffusion, Distillation, Model Pruning, Quantization, spacy, Ollama, GPT, Langchain

## EDUCATION

**Universidad Nacional de Rosario, Argentina**                                                                  *2011 - 2018*
*Computer Science (BsC + MsC equivalent), GPA: 9.83/10*
 **Fulbright Scholarship, University of Central Arkansas,**                                                      *2016*
*"Organized by U.S. Embassy"*

## ICPC COMPETITIVE PROGRAMMING

**ACM ICPC World Finalist contestant:** Morocco 2015, Thailand 2016, **LATAM Champion**
**ACM ICPC World Finalist coach:** Portugal (2019), Egypt (2023), Kazakhstan (2024)