# Omar Solano

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Machine Learning Engineer skilled in computer vision and large language models. I'm passionate about using AI to improve and create novel, useful products.

### **EXPERIENCE**

### Machine Learning Engineer

Sep 2023 - Present

Towards AI, New York, United States

- Wrote 10+ educational technical articles and 2 book chapters about Large Language Models, including Fine-tuning, RAG, Agents, and more. The online courses reached an audience of over 25,000 students.
- Developed and deployed two Chatbot applications using FastAPI and Python: an AI tutor (opensource) and a Job Board Assistant. The AI tutor project has been shared as part of the online courses. Deployed the APIs to Google Cloud Platform, ensuring high availability and scalability.

## Machine Learning Engineer

Jan 2021 - Jul 2023

designstripe, St-Bruno-de-Montarville, Canada

- Fine-tuned pre-trained AI models (text-to-image and LLMs) for various applications using Hugging Face libraries (Diffusers, PEFT, Transformers) and cloud computing instances (AWS, GCP)
- Deployed models to cloud services and developed REST APIs (FastAPI). I also provided internal demos (Gradio Python library) for internal evaluation, facilitating feedback and iterative improvement.
- I participated in designing and developing applications of machine learning algorithms for new products, including a color palette generator (a generative model using a GAN) and a color extraction tool from images (k-means).
- Participated in data acquisition (web scraping, labeling) and data processing (cleaning, filtering) activities to develop new models.
- Collaborated with cross-functional teams to define project requirements and deliverables.
- Conducted research to stay up-to-date on the latest AI advancements and actively shared insights with the team to identify and explore creative solutions relevant to the Startup.

### **EDUCATION**

Master of Engineering (M.Eng.) - Automated Manufacturing Engineering - Al

May 2023 - Apr 2025 (Expected)

École de technologie supérieure, Montréal, QC

#### Bachelor of Engineering (B.E.) - Automated Manufacturing Engineering

Sep 2017 - Jun 2021

École de technologie supérieure, Montréal, QC