Agustin Leon

al8937@nyu.edu | 929-261-9361 | website/portfolio | <u>linkedin</u> | github | Brooklyn, NY

EDUCATION

New York University, Tandon School of Engineering

New York, USA

Master of Science in Computer Engineering

Sep 2024 - May 2026

• GPA: 4.0/4.0

- Graduate Teaching Assistant for foundations of computer science course including algorithm design, data structures, operating systems, and C++ programming, mentoring cohorts of over 150 students.
- Courses: Machine Learning, MLOps, Deep Learning, Foundations of Robotics, Embedded Systems, Computing Systems Architecture. Upcoming: Computer Vision, Reinforcement Learning, Transformers-NLP-LLMs.

University of Chile

Santiago, Chile

Bachelor of Science in Economics (distinction)

Mar 2013 - Dec 2017

PROJECTS

'Spotify Buddies' - Full ML Pipeline for Playlist Recommender | MLOps, Docker, Ray

Spring 2025

- Full-stack ML system to recommend organic user-created playlists based on musical taste similarity, using dual-model architecture (user pairing via KNN + playlist ranking via Bayesian Personalized Ranking).
- Leaded training and experiment tracking with MLflow, and hyperparameter optimization using Ray.
- Integrated the system with a CI/CD pipeline on Kubernetes using Docker, Prometheus, and FastAPI for serving, load testing, and degradation monitoring.

LoRA Fine-Tuning with Domain-Adaptive Data Augmentation | HuggingFace, PEFT

Spring 2025

- Fine-tuned a Roberta-base model using Low-Rank Adaptation (LoRA), reducing trainable parameters to 917K.
- Improved model robustness with domain-adaptive data augmentation by fine-tuning GPT-2 to generate 12k synthetic text samples from unlabeled data using custom randomized prompts to prevent overfitting.
- Ranked 1st out of 400 participants in a <u>Kaggle competition</u>, with 93.8% validation and 86.95% test accuracy on a held-out OOD test dataset

Image classification with parameter-constrained ResNets | PyTorch, Data Augmentation

Fall 2024

- Trained a light ResNet with less than 5-million parameters on the CIFAR-10 dataset.
- Achieved 96% test accuracy on held-out test data, applying diverse techniques for data augmentation.

EXPERIENCE

Machine Learning Engineer Intern

New York, USA

Nevara

May 2025 - Aug 2025

- Selected to lead a team of 5 interns, setting priorities, coordinating tasks, removing blockers, and ensuring we delivered 4 out of 4 product milestones successfully and on time.
- Architected and deployed an AI-powered sales coaching platform on AWS, integrating FastAPI microservices with Supabase. Developed LLM pipelines with prompt engineering, input compression, retrieval-augmented generation (RAG), lightweight agent patterns, and a feedback loop for continuous improvement from user feedback.
- Reduced sales coach workload by 90% (from 10 hours of manual call review and report writing, to 1 hour) through automated note generation and multi-call report synthesis.

Associate Research Consultant

Santiago, Chile

GBA ECONOMIC CONSULTING

Jan 2022 - Sep 2024

- Conducted quantitative research for 15 projects across industries (energy, telecom, transportation, IP, antitrust).
- Delivered frequent presentations to diverse audiences, including C-suite executives and non-technical teams.
- Drove \$10M in client savings and profit gains; key clients included Mastercard, Engie, and LATAM Airlines.

Data Scientist
Ministry of Education, Government of Chile

Santiago, Chile Jul 2019 – Dec 2021

- Led a team to develop a student dropout classification model, increasing accuracy from 50% to 80%.
- Model gave insights for policy aimed at mitigating increased school dropout rates during the pandemic.

<u>Technical Skills:</u> Languages: Python, C/C++, JavaScript, R | ML/DL: PyTorch, TensorFlow, HuggingFace, scikit-learn, Keras, ONNX, LLMs (prompt engineering, RAG, agents) | Web: REST APIs, Node.js, FastAPI | Tools: Git, Docker, AWS, GCP, Kubernetes, MLflow, CI/CD | Data: Numpy, Matplotlib, MongoDB, Supabase, MATLAB | Robotics: ROS2