

IGOR L. R. AZEVEDO

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EXPERIENCE

The University of Tokyo

Research Assistant

Tokyo, Japan

Apr 2023 – Apr 2025

Nikkei (*Financial Times*) collaboration – news recommendation Aug 2023 – Apr 2025

- Built data pipelines and feature engineering over Nikkei user logs to train news recommenders
- Modelled implicit negative feedback with candidate-aware attention to reduce popularity bias
- Built NewsReX, a PyTorch/JAX framework for reproducible recommendation, 2.8x faster training
- Built multi-agent LLM pipelines with agentic retrieval and RAG to mine user behaviour patterns

Toyota collaboration – mobility and point-of-interest recommendation Apr 2023 – Aug 2023

- Processed vehicle GPS telemetry to predict driver destinations and recommend places to visit
- Benchmarked graph neural networks against baselines and presented the findings to Toyota

VOGA, acquired by BTG Pactual

Development Team Lead

Brasília, Brazil

July 2021 – Apr 2023

- Architected a real-time portfolio data platform monitoring over USD 300M in client assets
- Built AWS infrastructure as code with Terraform, Docker and Jenkins CI/CD
- Automated reporting workflows into ETL pipelines and self-service dashboards
- Led 7 engineers through the integration into **BTG Pactual**, Latin America's largest investment bank

Cellcrypt, secure communications

Applied Machine Learning Intern

London (Remote)

Sept 2020 – July 2021

- Built an ML training and inference pipeline on AWS that tuned VoIP codecs, lifting call quality 7%
- Diagnosed call degradation from packet captures and built a C++ VoIP testbed (PJSIP)

EDUCATION

Imperial College London

Master of Research in Artificial Intelligence and Machine Learning

London, United Kingdom

Sept 2025 – Sept 2026

- Researched multimodal representation collapse in contrastive learning and mixture of experts
- Investigated expert collapse in mixture-of-experts routing when minority classes are scarce

University of Brasília

BSc in Electrical Engineering, GPA 4.35/5.0

Brasília, Brazil

Aug 2016 – June 2022

- Researched FPGA hardware acceleration of SHA-3 cryptography for IoT devices
- Applied machine learning to financial market prediction in the undergraduate thesis

PROJECTS

[learning-ai.cafe](#), a collaborative open-source AI textbook, from intuition to depth

2026 – Present

HONOURS AND AWARDS

Japanese Government (MEXT) Research Scholarship, around 9% global acceptance

2023 – 2025

PIBIC/CNPq Research Scholarship, top 4% of undergraduates in Brazil

2019 – 2020

SIAM Travel Award, SIAM SDM 2025

2025

Y Combinator Startup School, Travel Grant

2026

COMPETITIONS

3rd Place, HackTheLaw, University of Cambridge and Stanford CodeX

2026

SKILLS

- Technical: Python, SQL, C++, Java, PyTorch, JAX, PyTorch Geometric, scikit-learn, Strands Agents, RAG, AWS, Docker
- Languages: Portuguese (native), English (fluent), Spanish (intermediate), Japanese (basic)