

# AGUSTIN ARIAS

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 Buenos Aires, Argentina

## EXPERIENCE

**Machine Learning Engineer** | *Python, Pytorch, Tensorflow, Pyspark, SparkSQL, Airflow* (1yr) Jul. 2023 – Present  
*Revelen.ai* *Buenos Aires, Argentina*

- Proficiently trained deep learning models in the field of computer vision, specializing in tasks such as instance segmentation, classification, and pattern recognition.
- Integrated transformer models from Hugging Face for advanced generative AI and content protection solutions.
- Executed data visualization and annotation processes through the utilization of a premium labeling tool, like Labelbox.
- Integrated LangChain and LlamaIndex to develop scalable AI applications, enhancing conversational AI capabilities.
- Leveraged Pinecone for efficient vector search and retrieval, significantly improving the performance of semantic search applications.
- Hands-on experience with transformer models, including GPT, and fine-tuning them for specific use cases.

**Machine Learning Engineer** | *Python, TensorFlow, Keras, Scikit-learn, PyTorch, DataBricks, Airflow* (1yr 8 mo) Dec. 2021 – Jul. 2023  
*Vairix - Nearshore Software Development Boutique* *Montevideo, Uruguay*

- Designed and implemented generative AI pipelines for US-based clients, including applications in synthetic content creation and advanced analytics.
- Achieved a performance level 150% greater than peers, aiding colleagues with methods to boost productivity.
- Developed and deployed machine learning models using TensorFlow and PyTorch, improving data-driven decision-making for clients.
- Hands-on experience with music and audio processing for similarity detection and enhancements.
- Utilized AWS and Google Cloud platforms for scalable model deployment and distributed training.
- Employed FastAPI and Pydantic to create robust, scalable APIs for machine learning models.

**ML & Data Science Engineer** | *Python, TensorFlow, Keras, Scikit-learn, PyTorch* (1yr 6 mo) Jul. 2020 – Dec. 2021  
*NextGo - Products and Services on Demand* *Miami Beach, Florida*

- Played a crucial role in a major project providing automation and services to a hospital, utilizing machine learning techniques to enhance service delivery and operational efficiency.
- Addressed critical issues promptly, increasing team productivity by 50%.
- Gained extensive experience with Kafka for event-driven architecture, applying machine learning models for real-time data processing and analysis.
- Strengthened skills in Python and popular machine learning frameworks, including TensorFlow, Keras, Scikit-learn, and PyTorch, to drive data-driven insights and solutions.

**ML & Data science intern** | *Python, TensorFlow, Keras, Scikit-learn, PyTorch* (1yr 8 mo) Jan. 2018 – Jul. 2020  
*Zination - Shopify based apps with over 10K customers combined* *Ontario, Canada*

- Developed a custom machine learning model for a Shutterstock API integration in Django, enhancing image selection capabilities in the Catalog Maker and receiving positive client feedback.
- Refactored code in Python and JavaScript, incorporating machine learning libraries to improve code efficiency and performance, resulting in a 30% reduction in page load times.
- Utilized TensorFlow and Scikit-learn to build and optimize predictive models, supporting data-driven decision-making and improving the functionality of client applications.

## EDUCATION

**An Introduction to Machine Learning** Buenos Aires, Argentina  
*Digital House* Mar. 2017 – Aug. 2017

**Master's in Mathematics** Buenos Aires, Argentina  
*University of Buenos Aires (UBA)* Aug. 2019 – Dec. 2023

## TECHNICAL SKILLS

**Languages:** Python (NumPy, Pandas, Scikit-learn, Pydantic), TensorFlow, Keras, PyTorch.

**Databases:** AWS, GCP, Azure, Vector Databases, Pinecone, MySQL, SQL (PostgreSQL), DyamODB.

**Deep Learning:** Transformer models, Hugging Face, LLMs, Diffusion Models, YOLOv8, Mask R-CNN.

**Cloud Platforms:** AWS, Google Cloud, Azure.

**Tools & Frameworks:** Hyperparameter Tuning, Distributed Training Frameworks, Version Control (Git), MLOps Tools.