Gonzalo Grau

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GitHub
LinkedIn

Senior Bioengineering student at ITBA,
specialized in Machine Learning and Artificial Intelligence

Education

•Bioengineering - Senior year (85%) *2020-ongoing*
Buenos Aires Institute of Technology Grade avg.: 8.66/10.0

•Friends of Fulbright 2024 exchange program *Spring 2024*
University of New Mexico Completed

Experience

•AI Internship at Biwares *Mar 2025 - Present day*
- Maintenance and development of an AI virtual assistant for a bank
- Creation of tools to streamline model evaluation in production
- Skills involved: OpenAI, Langgraph, Langchain, Git, GitHub, API management, Prompting, Scrum

•Applied AI Engineering Internship at DevRev *Dec 2024 - Mar 2025*
- Development of AI-powered automations to optimize internal processes
- Evaluation and implementation of AI agents for customer support
- Skills involved: Typescript, Git, GitHub, API management, Unit testing, Prompting, Scrum

•Teaching assistant at ITBA *Aug 2021 - Present day*
- Assisted in teaching classes in Introduction to Informatics and Data Structures and Algorithms, designed and graded assignments and exams
- Skills involved: Python, Object-Oriented Programming, Public speaking, Teaching

Personal Projects

•LungoVax: an interactive mechanical ventilation simulator
Awarded a special mention at the Argentinian physiology conference 2023
- Models lung response under a wide range of stimuli and experimental conditions
- Runs on a self-implemented Runge-Kutta 4 based differential equation solver engine
- Technologies: Python, NumPy, TKinter

•CircDrosView: an interactive visualizer for single-cell transcriptomics on Drosophila melanogaster
Based upon Rosbash's 2021 paper "Transcriptomic taxonomy of Drosophila circadian neurons around the clock"
- Extracts, transforms, and loads data from a single-cell RNA-seq dataset
- Allows for dot plot, heatmap, hourly expression, and cell type distribution visualizations
- Technologies: Python, NumPy, Pandas, Seaborn, Scanpy, Anndata, Streamlit

•Semi-automatic nuchal translucency measurement
An objective, user independent algorithm to measure nuchal translucency in ultrasound fetal scan
- Deep learning based image segmentation, combined with generalized linear regression models
- Technologies: Python, NumPy, OpenCV, SITK, Keras

Technical Skills and Interests

Languages: Spanish (native), English (proficient), French (intermediate)
Programming Languages: C, Python, MATLAB, Arduino, Typescript
Libraries: Numpy, Matplotlib, Jupyter, Scipy, Pandas, sklearn, OpenCV, PyTorch, Langchain, Langgraph
Tools: VS Code, Git, GitHub, Linux, Trello, MS Office, Siemens NX, SolidWorks, mySql, LaTeX
Fields of Interest: ML, AI, Deep Learning, Computational Modeling, Signal Processing, Computer Vision
Soft Skills: Autodidact, Adaptability, Agile methodology, Scrum framework

Certifications

•MITx Machine Learning with Python: From Linear Models to Deep Learning *2024*
•MITx Introduction to Computer Science and Programming Using Python *2022*
•Cambridge Certificate of Proficiency in English (CPE) *2019*
•International Baccalaureate (IB) *2019*
•High School Head Pupil and Valedictorian *2019*