

Gonzalo Grau

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

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🐙 GitHub

🌐 LinkedIn

EDUCATION

- **Bioengineering - Senior year (85%)** 2020-ongoing
Buenos Aires Institute of Technology CGPA: 3.46/4.00
- **Friends of Fulbright 2024 exchange program** Spring 2024
University of New Mexico Completed

EXPERIENCE

- **Applied AI Engineering Internship at DevRev** Dec 2024 - Present day
 - Helped develop AI powered automations for optimising customer support related processes
 - Provided tailored support for our clients, with a customer-facing approach
 - Skills involved: Typescript, git, GitHub, API management, unit testing, prompt engineering, sprint planning
- **Vice president at the IEEE EMBS ITBA Student Chapter** Aug 2022 - July 2024
 - Vice President for the IEEE Engineering in Medicine and Biology Society student chapter at ITBA
 - Collaborated with international student chapters, as well as multinational health and biotech companies
 - Skills involved: team leading, event planning
- **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
 - Became proficient in Python programming, source control, and public speaking

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
 - Allow 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

Tools: VS Code, Git, GitHub, Linux, Trello, MS Office, Siemens NX, SolidWorks, mySql, L^AT_EX

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