Gonzalo Grau

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GitHub
LinkedIn

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

Education

•Bioengineering *2020-ongoing*
Buenos Aires Institute of Technology CGPA: 3.43

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

Experience

•Applied AI Engineering Internship at DevRev *Dec 2024 - Present day*
– Worked alongside the Applied AI team from Argentina and India developing AI powered automations
– 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*
– Vicepresident for the IEEE Engineering in Medicine and Biology Society student chapter at the Buenos Aires Institute of Technology
– Skills involved: team leading, event planning, working alongside state-of-the-art companies and researchers

•Teaching assistant at ITBA *Aug 2021 - Present day*
– Worked alongside CS professors leading classes in Introduction to Informatics and Data Structures and Algorithms
– 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
– Technology Used: Python, Numpy, TKinter

•Real-time seizure detection
A machine learning model to detect seizure events in real time based on EEG analysis
– Uses support vector machine to classify short multichannel signal segments
– Performs spatial, statistical, and Fourier analysis
– Technology used: Python, Numpy, Scikit-learn, Scipy.

•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
– Technology Used: Python, Numpy, OpenCV, SITK, keras

Technical Skills and Interests

Languages: Spanish (native), English (proficient), French (intermediate)
Programming Languages: C, Python, MATLAB, Arduino
Libraries : Numpy, Matplotlib, Jupyter, Scipy, Pandas, sklearn, OpenCV, PyTorch
Other Tools: VScode, Git, Github, Linux, Trello, MS Office, NX, SolidWorks, mySql, LaTeX
Areas of Interest: ML, AI, Deep Learning, Computational Modeling, Signal Processing, Computer Vision
Soft Skills: Problem Solving, Self-learning, 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*