Rodrigo **Pozo**

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🎓 ACADEMIC BACKGROUND

2023 - Present	**Master of Science in Engineering**	📍 Macul
	Pontificia Universidad Católica de Chile	
	Study focus: Use of generative models of deep neural networks (GANs, VAEs, Diffusion Models, Transformers) to study computational creativity in audio and music	
2019 - Present	**Electrical Engineering**	📍 Macul
	Pontificia Universidad Católica de Chile	
	Currently enrolled in an undergraduate program leading to a degree in electrical civil engineering with a specialization in programming.	
2011 - 2019	**High School**	📍 Providencia
	Liceo José Victorino Lastarria	

💼 WORK EXPERIENCE

Dec. 2023 - Mar. 2024	**Professional Internship**	📍 Providencia
	Manglar Labs SpA.	
	Conducted requirements gathering for Internet of Things (IoT) systems, with a particular focus on satellite communication. Evaluated a satellite communication module, performing various tests such as energy consumption measurement, designing a use case for the livestock sector, and conducting field tests. Additionally, a technical report was written summarizing the results obtained and conclusions derived from the project.	
January 2023	**Electrical Maintenance Intern**	📍 San Miguel
	Madeco by Nexans	
	Carried out preventive maintenance tasks on machinery and production lines at the Madeco *by Nexans* conductor factory, with a specialized focus on the electrical field. My responsibilities included maintenance and calibration of electrical panels, execution of cleaning protocols, and inspection of motors and instrumentation.	
2021 - 2022	**Undergraduate Researcher**	📍 Macul
	Faculty of Engineering UC	
	Developed computational simulations to study systematic effects present in the optics used by cosmological experiments observing the cosmic background from Chile. Our group collaborated directly with major experiments in this area, contributing to the characterization and control of these effects. Specifically, I modeled the optical response of the CLASS telescopes using the General Reflector Antenna Software Package (GRASP), allowing for the analysis and mitigation of systematic effects in the optics of these telescopes.	

🖥 PROFESSIONAL SKILLS

Data Science	Languages	Simulation	Office Tools
Pandas: *Advanced*	**Python**: *Advanced*	**LTSpice**: *Advanced*	**MS Office**: *Intermediate*
Matplotlib: *Advanced*	**C/C++**: *Advanced*	**GRASP**: *Intermediate*	**LaTeX**: *Advanced*
Mathematica: *Advanced*	**JavaScript**: *Basic*	**Vivado**: *Intermediate*	
Pytorch : *Intermediate*	**SQL**: *Intermediate*		
Tensorflow: *Intermediate*	**Matlab**: *Intermediate*		
MATLAB: *Intermediate*			
MongoDB: *Basic*			

🧍OTHER EXPERIENCES

2022	**Winter Work**	📍 Nueva Imperial, Araucanía

Volunteer

Construction of poverty alleviation tools such as pig pens, greenhouses, chicken coops, clay ovens, etc. All of these were aimed at low-income families in the Araucanía Region. This was done in a commission of 180 volunteers from various professions and universities.

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