Luis Montal de Grandes

Birth : 17/01/2001

Email : lmontaldegrandes@gmail.com
Mobile : +34 620915813

EDUCATION

University of Navarra. Tecnun School of Engineering — San Sebastián, Spain
Degree in Electrical Engineering — *Sept. 2020 - May 2024*

- **Thesis**: IQ demodulator design for the control/readout system of a superconducting qubit-based quantum computer.
- **Salutatorian-equivalent rank**: 2nd highest GPA of graduating class.
- **Fostering Talent Member**: High-performance program of the cohort. Providing research assistant positions and access to industry and research seminars.
- **Relevant coursework**: Algebra; Calculus I, II; Statistics and Probability; Differential Equations; Data Analysis; Signal Theory; Signals and Systems; Data Analytics; Data Transmission.

EXPERIENCE

Research Assistant — Barcelona, Spain
IESE Business School — *Sept. 2024 - Present*

- **Prof. Chadwick Miller and Prof. Albert Valentí**: Exploring patterns in alcohol consumption data using econometric tools in Stata.
- **Prof. Gaizka Ormazabal**: Developing a text-based ESG indicator from corporate reports using fine-tuned LLM and supervised machine learning methods, and evaluating the impact of new regulations on firms' disclosures using python and Stata tools. (Working paper).
- **Prof. Martin Jacob**: Analyzing employee well-being responses to tax shocks using firm- and worker-level evidence linking OSHA data using fuzzy mathcing tools in python (Paper in progress: *Corporate Taxes and Worker Safety*); and analyzing spillover effects of corporate taxes using Stata (HKU Sustainability Global Research Institute).
- **Prof. Miguel Duro**: Analysis of the EU Emissions Trading System (ETS), impact of new regulations on company profits and sustainable decisions. (Paper in progress: *ETS Carbon Incentives: The Hidden Cost of (Not) Paying*).
- **Prof. Diego Aparicio**: Analyzing gender-based price differentials and algorithm-driven pricing fluctuations across markets. (diegoaparicio.org/wp-content).

Research Assistant — San Sebastián, Spain
Tecnun School of Engineering. Electronics department — *Sept. 2021 - May 2023*

- **Machine Learning**: Building supervised machine learning model to recognize wireless RFID tags (IEEE paper).
- **Satellite project**: Assisted in planning and developing a satellite launch, identifying launchers, certifications, standards and possible missions.

Software Developer (Internship) — San Sebastián, Spain
TREBE. Vicomtech Research Center — *June 23 - August 23*

- **Machine Learning**: Development of a machine learning model designed to identify various subjects within a news broadcast and generate summaries with non-supervised methods.

PUBLICATIONS AND PRESENTATIONS

- **How natural disasters shake the alcohol industry**: Luis Montal, Chadwick Miller and Albert Valentí. (Paper in progress).

- **A Methodology for Cryogenic Modeling of CMOS Technology Based on BSIM-BULK**: A. Leal, Luis Montal, A. Nerushenko, H. Solar and R. Berenguer. Submitted and presented in DCIS25 (40th Conference on Design of Circuits and Integrated Systems). (IEEE paper) .

LANGUAGES

Spanish: Native   **Catalan:** Native   **English:** Advanced (TOEFL 107)   **German:** Beginner (A2)

SKILLS

Programming languages: Stata, R, Matlab, C++, Javascript, Assembly, VHDL
AI: Classic methods, NLP. Completed a specialization track emphasizing machine learning (Data Analytics).

EXTRACURRICULAR

- **President of students commitee (2022-24)**: Coordination of 60+ individuals and 8 teams promoting cultural, professional, and interpersonal skill development activities.
- **Director of studies (2021-23)**: Advisor and teacher of 20+ first-year engineering students. Provided advising, support, and review seminars on algebra, calculus and probability.
- **Culture**: Actor in Tecnun's theatre company. Guitarist in high school band 'Pista3'. Finalist in the undergraduate anthropology conference UNIV FORUM in 2024 (Communications category).
- **Volunteered**: Organized in solidarity race against cancer (2022), organized a solidarity concert (2023), catechist (2019-2022), volunteered at summer school camps (2017-2019), provided assistance to underprivileged individuals: Caritas Hotzaldi, Municipal Prison, Little Sisters of the Poor and volunteered at the 2018 Mediterranean Games.