Marcelo Gallardo

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Department of Mathematics
Pontificia Universidad Católica del Perú, Lima, Pe.

Education

Courses in the Graduate school in Applied Mathematics and Economics. 2023-2025. Pontificia Universidad Católica del Perú. 19/20.

B.s. and Lic. in Mathematics and 2020 - 2025. Pontificia Universidad Católica del Perú. 19.18/20 (Faculty of Sciences and Engineering) and 18.24/20 (overall, attestation here).

General Humanistic Studies (2019). Pontificia Universidad Católica del Perú. 19/20.

Baccalauréat Scientifique (2017-2019). Lycée Franco Péruvien. 19.91/20.

Summer and winter school

QLab Summer School, Lima, Pe. Jan-Feb. 2022, 2023, 2024.

QLab Winter School, Lima, Pe. Aug. 2024.

Harvard University, Ethics of Artificial Intelligence in Business, MA. Aug. 2024.

Academic Statement

Relevant coursework at PUCP here.

Experience

Research Assistant (2021-)

   With Professor Juan Carlos Carbajal. 2024-. UNSW Sydney, Au.
   With Professor Juan León Jara-Almonte. 2022-2023. GRADE, Lima, Pe.
   With Professor Jorge Richard Chávez Fuentes. 2021-2025. PUCP, Lima, Pe.

Teaching Assistant (2022-)

   Mathematics for Economics and Finance 3. With Professor Jorge Richard Chávez Fuentes.

   Mathematics for Economists (IV). With Professor Jorge Richard Chávez Fuentes.

   Optimization I. With Professor Jorge Richard Chávez Fuentes.
   Guest professor: Federico Echenique (UC Berkeley).

   Functional Analysis. With Professor Percy Braulio Fernández.

   Microeconomics 2. With Professor Pavel Coronado Castellanos.

   Financial Microeconomics. With Professor José David Gallardo Kú.

   Applied Differential Equations. With Professor Marcelo Flamarion.

Working papers

Field Experiments on Seasonal Products and Markdown Pricing. With Carlos Noton.

Completed manuscripts

Congestion and Penalization in Optimal Transport. With Jorge Richard Chávez Fuentes and Manuel Loaiza. *Submitted.* arXiv:2410.07363

Heterogeneous Quadratic Regularization in Optimal Transport. With Jorge Richard Chávez Fuentes and Manuel Loaiza. *Submitted.*

Irregular wave dynamics driven by a random force within the Burgers equation. With Marcelo Flamarion. *Submitted.*

Books

Linear Algebra and Optimization for Economists. With Jorge Richard Chávez Fuentes. Foreword from Professor César Martinelli. Fondo Editorial PUCP.

Dynamical Systems and Optimal Control for Economists. With Jorge Richard Chávez Fuentes. Under review at Springer.

Awards and distinctions

Ranked 1st in the Mathematics major and within the top 1.15% of my cohort of the Faculty of Sciences and Engineering, PUCP, Lima, Pe, 2025.

Top 2.15% in the history of the Faculty of Sciences and Engineering (33,725 students). PUCP, Lima, Pe, 2025.

Excellence Scholarship. PUCP, Lima, Pe, 2024.

Winner of the contest "Initiation to Scientific Research." PUCP, Lima, Pe, 2021.

Winner of the contest "Initiation to Scientific Research." PUCP, Lima, Pe, 2020.

Mention Très Bien at the French Baccalauréat (BAC S, score: 19.91/20), which granted direct admission to undergraduate institutions (such as PUCP) with first-year course validations (see Relevé de Notes BAC S). Lycée Franco-Péruvien, Lima, Pe, 2018.

Skills

Programming: LaTeX, Python.

Languages: Spanish (Native), French (Advanced, BAC 2019), English (Proficient, FCE 2017).

Research interests

Mechanism design. Matching. Decision theory. Optimal Transport. Optimal Control.

Academic presentations

XXXVIII Colloquium of the Peruvian Mathematical Society. Aug. 2025.

References

César Martinelli. Professor of Economics at George Mason University.

Juan Carlos Carbajal. Associate Professor at the UNSW Sydney.

Carlos Noton. Assistant Professor at the School of Management of the Pontificia Universidad Católica de Chile.

Jorge Richard Chávez. Professor of the Mathematics Department at Pontificia Universidad Católica del Perú.