Marcelo Gallardo

Mathematics · PUCP

San Isidro, Lima, Peru

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Education

Pontificia Universidad Católica del Perú *Lima, Pe*
B.s. Mathematics *2020-E (2025)*

Q-LAB *Lima, Pe*
Summer School *January-February 2022, 2023 and 2024*

École Polytechnique Fédérale de Lausanne *Lausanne, Sw*
Cycle Propédeutique Physics *2019 - 2020*

Academic Statement

Pontificia Universidad Católica del Perú *Lima, Pe*
2020-E (2025)

- Undergraduate Academic Statement

Experience

Teaching Assistant *Lima, Pe*
Pontificia Universidad Católica del Perú *2022-2024*
- **Mathematics for economists 3.** Undergraduate. With Professor PhD Jorge R. Chávez.
- **Mathematics for economists 4.** Undergraduate. With Professor PhD Jorge R. Chávez.
- **Convex Optimization.** Undergraduate. With Professor PhD Jorge R. Chávez.
- **Functional Analysis.** Undergraduate. With Professor PhD Percy Fernández.
- **Microeconomics 2.** Undergraduate. With PhD Pavel Coronado.

Research Assistant *Lima, Pe*
Grupo de Análisis para el Desarrollo *2022 - present*
- Working with PhD Juan L. Jara Almonte.
Pontificia Universidad Católica del Perú *Lima, Pe*
- Working with PhD Jorge R. Chávez. *2022 - present*
UNSW Sydney *Sydney, Au*
- Working with PhD Juan Carlos Carbajal. *2024 - present*

Working papers, papers and others

Harnessing Twitter and GPT for a Novel Political Uncertainty Index for Peru: Implications for USD/PEN Exchange Rate Fluctuations with Manuel Loaiza and PhD Gabriel Rodriguez.

Innovation in Peruvian universities with PhD Juan L. Jara.

Brouwer fixed point theorem and applications in general equilibrium with Carlos Cosentino and Eduardo Llamoca.

Matching, Optimal Transport and School Choice with PhD Jorge R. Chávez.

Lecture notes in Optimal Transport: Entropic Regularization and Applications to Economics and Finance with Carlos Cosentino and mentored by PhD Johel Beltrán.

Lecture notes in Econometrics: with PhD Juan L. Jara.

Books

Linear Algebra and Optimization for Economists (pre-published) with PhD Jorge R. Chávez.

Dynamical Systems and Optimal Control Theory in Continuous Time for Economists (working) with PhD Jorge R. Chávez.

Awards, & achievements

12/2018	**Mention d'excellence au BAC, top mark 19.91/20**, Colegio Franco Peruano, Lima PE	
05/2019	**Admission to l'X Bachelor Program**, Paris, France	
12/2020	**Contest initiation to scientific research**, PUCP Lima, PE	*900 s/.*
12/2021	**Contest initiation to scientific research**, PUCP Lima, PE	*900 s/.*
2022-2023	**Ranked first in Economic courses**, PUCP Lima, PE	
2022-	**Top 1% Faculty of Sciences and Engineering** , PUCP Lima, PE	
2022-	**Ranked first in my class in the Mathematics major**, PUCP Lima, PE	

Skills

Programming: Python, LaTeX, STATA

Languages: Spanish (Native), French (Advanced), English (Proficient), Portuguese (Basic).

Research interests

Convex optimization. Matching theory. Microeconomic Theory. Economic growth theory. Optimal control theory. Optimal Transport.

References

1. **Jorge R. Chávez Fuentes.** Professor of the Mathematics Department at Pontificia Universidad Católica del Perú.

2. **Juan L. Jara Almonte.** Associate Professor of the Economics Department at Pontificia Universidad Católica del Perú and Research Associate at GRADE.

3. **Juan Carlos Carbajal.** Associate Professor and Post-Graduate Coordinator (PhD program) School of Economics, UNSW Sydney

4. **Alfredo B. Poirier Schmidt.** Professor of the Mathematics Department at Pontificia Universidad Católica del Perú.

5. **Johel V. Beltrán Ramírez.** Professor of the Mathematics Department at Pontificia Universidad Católica del Perú and Visiting Professor at Fundação Getulio Vargas.

6. **Pavel Coronado.** Associate Professor of the Economics Department at Pontificia Universidad Católica del Perú and Q-LAB director.

7. **Percy Fernandez.** Professor and Graduate School Director of the Mathematics Department at Pontificia Universidad Católica del Perú.