Marcelo Gallardo

MATHEMATICS · PUCP San Isidro, Lima, Peru

Education

Pontificia Universidad Católica del Perú

Lima, Pe

B.s. MATHEMATICS

2020-E (2025)

SUMMER SCHOOL

Q-LAB

Lima, Pe

January-February 2022, 2023

and 2024

École Polytechnique Fédérale de Lausanne

Lausanne, Sw

CYCLE PROPÉDEUTIQUE PHYSICS

2019 - 2020

Academic Statement

Undergraduate Academic Statement

Lima, Pe

2020-E (2025)

Experience _____

Teaching Assistant
PONTIFICIA UNIVERSIDAD CATÓLICA DEL PERÚ

Lima, Pe

2022-2024

- Mathematics for economists 3. Undergraduate. With PhD Jorge R. Chávez.
- Mathematics for economists 4. Undergraduate. With PhD Jorge R. Chávez.
- Convex Optimization. Undergraduate. With PhD Jorge R. Chávez.
- Functional Analysis. Undergraduate. With PhD Percy Fernández.
- Microeconomics 2. Undergraduate. With PhD Pavel Coronado.

Research Assistant Lima, Pe

GRUPO DE ANÁLISIS PARA EL DESARROLLO

PONTIFICIA UNIVERSIDAD CATÓLICA DEL PERÚ

2022 - present

• Working with PhD Juan L. Jara Almonte.

Lima, Pe 2022 - present

Westing the DED to the District

• Working with PhD Jorge R. Chávez.

UNSW Sydney

Sydney, Au

• Working with PhD Juan Carlos Carbajal.

2024 - present

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.

Working papers, papers and others_

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, PE2022- Ranked first in my class in the Mathematics major, PUCP Lima, PE	

Skills

Programming: Python, LTFX, 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. Professor of the Mathematics Department at Pontificia Universidad Católica del Perú.
- 2. **Juan L. Jara.** 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 of the School of Economics at the UNSW Sydney.
- 4. Alfredo B. Poirier. Professor of the Mathematics Department at Pontificia Universidad Católica del Perú.
- 5. **Johel 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 ex-director.
- 7. **Percy Fernandez.** Professor and Graduate School Director of the Mathematics Department at Pontificia Universidad Católica del Perú.