# Marcelo Gallardo

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 \_\_\_\_\_

**UNSW Sydney** 

**Teaching Assistant** PONTIFICIA UNIVERSIDAD CATÓLICA DEL PERÚ Lima, Pe

2022-2024

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

**Research Assistant** Lima, Pe

GRUPO DE ANÁLISIS PARA EL DESARROLLO

2022 - present

· Working with PhD Juan León Jara.

Lima, Pe

PONTIFICIA UNIVERSIDAD CATÓLICA DEL PERÚ

2022 - present

· Working with PhD Jorge Richard Chávez.

Sydney, Au

2024 - present

• Working with PhD Juan Carlos Carbajal.

# 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 H. 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 V. 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	
<ul><li>2022- Top 1% Faculty of Sciences and Engineering , PUCP Lima, PE</li><li>2022- Ranked first in my class in the Mathematics major, PUCP Lima, PE</li></ul>	

## 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 Richard Chávez.** Professor of the Mathematics Department at Pontificia Universidad Católica del Perú.
- 2. **Juan León 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 Bernardo Poirier. Professor of the Mathematics Department at Pontificia Universidad Católica del Perú.
- 5. **Johel Victorino Beltrán.** 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 Braulio Fernandez.** Professor and Graduate School Director of the Mathematics Department at Pontificia Universidad Católica del Perú.