# 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	
<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 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 Beltrán Ramírez.** Professor of the Mathematics Department at Pontificia Universidad Católica del Perú and Visiting Professor at Fundação Getulio Vargas.
- 6. **Pavel Coronado.** ssociate 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.