

PERSONAL INFORMATION

Luciano Paz



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Date of birth 17 March 1987 | Nationality Argentina

WORK EXPERIENCE

08/03/2017 – Present

Postdoc

Tactile Perception and Learning Lab, Scuola Internazionale Superiore di Studi Avanzati, Via Bonomea 265, 34136 Trieste, TS, Italia

Development of statistical and computational models for decision making and sensory processing.

Business or sector European institution

01/04/2016 – 31/08/2016

Web developer

Departamento de física, Universidad de Buenos Aires, Intendente Güiraldes 2160, Buenos Aires, Argentina

Develop the back and frontend of the institutional research area for the website of the University of Buenos Aires' physics department.

- Developed a Joomla component.
- Interaction between a MySQL database, the php backend and the frontend via PHP and javascript.

Business or sector University

01/03/2014 – 31/05/2016

Graduate teaching assistant

Departamento de física, Universidad de Buenos Aires, Intendente Güiraldes 2160, Buenos Aires, Argentina

Teaching assistant of graduate level physics courses

Business or sector University

01/03/2014 – 31/05/2016

Graduate teaching assistant

Ciclo Básico común, Universidad de Buenos Aires, Ramos Mejía 841, Buenos Aires, Argentina

Taught physics theory and exercises as part of the university entry level courses.

Business or sector University

01/04/2010 – 31/03/2012

Undergraduate teaching assistant

Departamento de física, Universidad de Buenos Aires, Intendente Güiraldes 2160, Buenos Aires, Argentina

Teaching assistant of the practical part of physics courses

Business or sector University

EDUCATION AND TRAINING

2011–2016

PhD - Thesis title: “Ensamblando operaciones mentales. Desarrollo de un marco teórico y computacional para la toma de decisiones humanas”, Doctor of the university of Buenos Aires, Area Physical Sciences.

ISCED 8

Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Buenos Aires, Argentina

2006–2011 **Laurea in Physics - Thesis title: “Aprendiendo a ensamblar operaciones mentales”, License in physical science.** ISCED 6

Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Buenos Aires, Argentina

PERSONAL SKILLS

Mother tongue Spanish

Other languages

| | UNDERSTANDING | | SPEAKING | | WRITING |
|---------|---------------|---------|--------------------|-------------------|---------|
| | Listening | Reading | Spoken interaction | Spoken production | |
| English | C2 | C2 | C2 | C2 | C2 |
| Italian | B2 | B2 | B1 | A2 | A2 |

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- teaching skills: I have worked as a teaching assistant at university level courses for around 4 years. Thanks to this, I've developed good communication skills, in particular I can summarize, make concrete explanations of complex subjects to inexperienced audiences.
- team work: during my PhD and postdoc, I've worked in close collaboration with my research group and other teams across the world. Furthermore, as a pymc developer, I've improved my ability to work remotely and communicate with a spatially segregated team.
- mediating skills: I have worked in the field of neuroscience during my PhD and postdoc. The field is very diverse and I have specialized in the computational, mathematical and statistical side of the work, but I must always be able to communicate well with experts of other subjects like biology, physiology and animal behavior. Thanks to this, I have gained a lot of training in communicating complicated subjects in simple terms.
- intercultural skills: I've worked in Argentina and Italy, I've also lived in the United States, and have traveled for work to Spain, France and Germany. I am used to be and work in international and multicultural environments, and I strongly appreciate cultural diversity.

Organisational / managerial skills

- I have organized discussions and internal seminars at my research groups during both my PhD and postdoc.
- As part of the PHD4PMI initiative with INNOVA S.p.A., I was the contact person between my work group and the company. I coordinated my team's efforts to meet INNOVA's goals.
- As part of my duties as postdoc, I have contributed to writing research grant applications.
- I know SCRUM for agile software development.

Digital competences

| SELF-ASSESSMENT | | | | |
|------------------------|-----------------|------------------|------------------|-----------------|
| Information Processing | Communication | Content creation | Safety | Problem solving |
| Proficient user | Proficient user | Proficient user | Independent user | Proficient user |

[Digital competences - Self-assessment grid](#)

Technical skills

- Knowledge of Python, MATLAB, C, C++
- Knowledge of PHP, javascript, CSS, Joomla, AJAX, HTML
- Knowledge of probabilistic programming, Markov Chain Monte Carlo, bayesian statistics
- Data visualization in Python and MATLAB
- Knowledge of scikit-learn and machine learning
- Knowledge of Git and version control
- PyMC developer, un Linguaggio di Programmazione Probabilistica in Python (<https://docs.pymc.io/>)

Other skills

I play the piano. Enjoy sports like football and basket.

Driving licence

A1, B

OTHER INFORMATION

International peer reviewed publications

1. Paz, L., Insabato, A., Zylberberg, A., Deco, G., Sigman M., (2016) "Confidence through consensus: a neural mechanism for uncertainty monitoring", Scientific Reports, 6, 21830. doi: 10.1038/srep21830
2. Paz, L., Goldin, A. P., Diuk C., Sigman M. (2015) "Parsing heuristic and forward search in first-graders game-play behavior", Cognitive Science, 39(5), 944-971. doi: 10.1111/cogs.12181
3. A. Zylberberg, L. Paz, P. R. Roelfsema, S. Dehaene, M. Sigman, Papers in Physics 5, 050006 (2013)
4. Goldin, Andrea P., Segretin, Maria S. Hermida, Maria J., Paz, Luciano, Lipina, Sebastián J., Sigman, Mariano. (2013) "Training Planning and Working Memory in Third Graders", Mind, Brain, and Education, 7(2), 136-146.

Abstracts in international conferences

1. Sebastian Reinartz , Alessandro Toso, Arash Fassihi, Luciano Paz, Francesca Pulecchi, Mathew E. Diamond. (2019) "Perceiving the duration of a vibration: psychophysics, leaky integrator model, optogenetic testing". Poster in COSYNE, Lisbona, Portugal
2. Alessandro Toso, Luciano Paz, Arash Fassihi, Francesca Pulecchi, Mathew Diamond (2018) "Duration and intensity perception, in parallel, through leaky integration of sensory input". Poster in SfN, San Diego, USA
3. Alessandro Toso, Luciano Paz, Arash Fassihi, Francesca Pulecchi, Mathew Diamond (2018) "Duration and intensity perception, in parallel, through leaky integration of sensory input". Poster in FENS, Berlino, Germania
4. Luciano Paz, Andrea Insabato, Ariel Zylberberg, Gustavo Deco, Mariano Sigman. (2015) "Un modelo computacional biofísicamente plausible de la construcción de confianza en toma de decisiones perceptuales". Poster in NeuroCog2015, Buenos Aires, Argentina.
5. Luciano Paz, Andrea P. Goldin, Mariano Sigman. (2011) "Understanding children's decision processes with planning algorithms". Poster in SAN XXVI, Sierra Grande, Córdoba, Argentina.

Participation in technological projects

- December 2018 – March 2019, PHD4PMI project between SISSA and INNOVA to develop a data driven tool to study GPS data.
- November 2018 – Present, pymc developer.

People to contact for reference

- Mathew Diamond
- Mariano Sigman
- Gustavo Deco