

# Paloma Gonzalez Rojas

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## E D U C A T I O N

**Massachusetts Institute of Technology (MIT)**

Cambridge, MA, USA

2015-2020 PhD Candidate in Design and Computation. Computer Science Minor.

2013-2015 Master of Science in Design and Computation.

**Catholic University of Chile (PUC)**

Santiago, Chile

2007-2009 Master of Science in Architecture Design.

2002-2006 Professional and Bachelor Degree of Architecture.

## E X P E R I E N C E

**Author of the MIT PhD Dissertation : *Machine Navigation***

2015-2021 *Researcher, interaction designer, developer.* My PhD Committee is composed by: Prof. Takehiko Nagakura, Regina Barzilay, Ila Fiete, and Svafa Grönfeldt. Developed a model with Reinforcement learning and human trajectory data processing. The model has applications for managing tourist sites, controlling capacity, improving human-centered design, and covid-19 requirements.

**Co-Lead MIT Machu Picchu Digital Heritage**

2017-2019 *Researcher and Co-Lead* with Prof. Takehiko Nagakura. Led a multidisciplinary team of researchers to digitize Inca monuments. Coordinated the collaboration with Peruvian Culture Ministry, supervised the training of local officials for piloting drones and digitization of the monuments. Contributed to the development of AR/VR interactive applications. Project featured on MIT News.

**Led the MIT Biomaterials Project for Extreme Environments**

2017-2020 *Project Director and Designer.* Developed and produced biodegradable plastic packaging called WoodPack. Tested mechanical properties of the materials. Led and participated in the co-creation of biomaterials for digital fabrication. Designed biodegradable plastics and wood based material extrusion. Project supported by CBA, and FormLabs, funded by MIT and MIT MISTI Chile.

**Co-led The Acoustic Device Design and Construction**

2008 - 2009 *Co-led* the design, testing and construction by 20 students and 10 construction workers, of the parametric acoustic device composed by 144 different drywall board.

## S E L E C T E D E X H I B I T S

**Created WALK ACROSS at MIT MUSEUM**

2014-2017 *Interaction Designer.* Developed, programmed, and built an interactive installation. The art piece tracks the trajectories of the visitors and displays them in a human scale projection on the wall. Selected among 200 MIT students applicants, featured on MIT News.

## S E L E C T E D A W A R D S

**Won Chile Scholarship (twice)**

2013 | 2015 Full scholarship for Master's Degree and PhD Degree at MIT.

## T E A C H I N G E X P E R I E N C E

**Co-Taught MIT How to Make Almost Anything Class**

2017-2019 Teaching Assistant for prof. Neil Gershenfeld (CBA). Guided students to design projects and applications with digital fabrication and electronics. Worked one-on-one with 14 from diverse backgrounds.

**Co-Taught MIT Advanced Interactions Class**

2018 Teaching Assistant for prof. Marcelo Cohelo (FormLabs). Guided students with diverse backgrounds to design interactive led games at market ready products.

## V O L U N T E E R I N G

**President of MIT Westgate Dorm**

2016-2018 Led the student executive committee, helping women and children residents by fundraising for children activities to help with care giving.

## S K I L L S

Software :

- ◆◆◆◆ Adobe Creative Suite
- ◆◆◆ InVision
- ◆◆ Figma
- ◆◆◆ Unity 3D
- ◆◆◆ Autodesk Fusion,
- ◆◆ Revit, Eagle
- ◆◆◆◆ Rhinoceros

Programming :

- ◆◆◆◆ Python
- ◆◆◆ Java, C#
- ◆◆ JavaScript, HTML

Libraries:

- ◆◆◆◆ Processing
- ◆◆◆ OpeCV
- ◆◆ Tensorflow
- ◆◆ Vuforia

Fabrication:

- ◆◆◆◆ CNC Milling
- ◆◆◆◆ 3D Printing
- ◆◆◆◆ Laser Cutting

Languages:

- ◆◆◆◆ English
- ◆◆◆◆ Spanish
- ◆◆ Chinese

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