

Julie Silva da Assunção

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EDUCATION

August 2019 -
August 2020

ECOLE DES PONTS PARISTECH, Paris, France

Masters in Materials Science for Sustainable Construction

- Courses: Developing and understanding building materials; Sustainable Constructions; Rheophysics; Physics-Chemistry of cement-based materials.

August 2017 -
August 2020

ECOLE DES PONTS PARISTECH, Paris, France

Master of science in civil engineering, Double-degree program

- Courses: Mechanical behavior of materials; Plasticity, limit analysis and yield design; Engineering Geology; Innovative Materials in concrete constructions.

January 2014 –
December 2020

ESCOLA POLITECNICA DA UNIVERSIDADE DE SAO PAULO, São Paulo, Brazil

Bachelor: Civil Engineering

- Courses: Fundamentals of Materials Science; Soil Mechanics; Construction Materials; Fundamentals of Geology and Mineralogy; Modelling in Civil and Environmental Engineering.

RESEARCH AND WORK EXPERIENCE

February 2020 -
August 2020

BLOCK RESEARCH GROUP ETH, Zürich, Switzerland

Master Student

- Computational analysis of funicular structures in concrete.
- This work leads to the conclusion of ENPC master's thesis focusing on the optimization of 3D printing geometries in concrete.

January 2019 -
July 2019

EIFFAGE CIVIL ENGINEERING, Paris, France

Research Intern

- Research on the design of concrete segments in the construction of underground tunnels.
- Rheology measurement of the samples followed by mechanical tests on dried state.

July 2018 –
December 2018

SAINT GOBAIN RESEARCH, Paris, France

Research Intern

- Set up mechanical modeling tools to optimize the nonlinear behavior of metal structures contributing to fire resistance.
- Mechanical finite element modeling with Abaqus, performing mechanical tests on the optimized structure.

November 2016 –
February 2017

UNIVERSITAT POLITÈCNICA DE CATALUNYA, Barcelona, Spain

Research Intern

- Work alongside experts on the field of fiber-reinforced concrete conducting mechanical experiments in a partnership with Escola Politècnica USP.

November 2015 –
March 2017

ESCOLA POLITECNICA DA UNIVERSIDADE DE SAO PAULO, Sao Paulo, Brazil

Research Intern at the Building Materials Analysis Laboratory

- Experimental evaluation of comparative behavior of fiber-reinforced concrete with metal fibers with two levels of resistance.
- Determination of the increase in resistance: Probabilistic analyzes; Mechanical tests of bending and studies of compression failure and rheological properties during casting.

SKILLS AND HONORS

Awards

Sustainable Development scholarship – Group Saint Gobain Research, France, 2017 - 2018
Brazilian governmental scholarship to student research (FAPESP), Brazil, 2015-2017

Technical Skills

Rhinoceros/Grasshopper, Abaqus, CAD Siemens NX10 3D, MS Office, Python, C, R studio.

Language Skills

Portuguese: native speaker; English: fluent; French: fluent; Spanish: Limited working proficiency