

# RESUME

Jéssica Caroline dos Santos Silva

## Profile

Experience participating in cross-functional multidisciplinary teams, designing and conducting interdisciplinary projects on air and water quality, waste management, threats to biodiversity and carbon and nitrogen storage and cycling in tropical forests. Proficient in collecting and analyzing data to support studies that can contribute to strategic environmental policy and guide decision-making processes. A committed professional, responsible, and hard-working. Fascinated and intrigued by the environmental complexities, is passionate about the environmental natural processes and committed to learn how to work with nature and help create a better-balanced world.

## Education

2018-2022

**Ph.D. Student**

Water Resources and  
Environmental  
Engineering

♦ **Federal University of Parana (UFPR), Brazil.**

Research Project: "Integrated evaluation of atmospheric pollution and socioecological risks in an industrial area from Santa Catarina state".  
Doctorate Scholarship (CAPES-DS).

2019

**Advanced studies  
on Atmospheric  
Aerosols**

♦ **University of Sao Paulo (USP), Brazil.**

Sao Paulo School of Advanced Science on  
Atmospheric Aerosols: Properties,  
Measurements, Modeling, and Effects on  
Climate and Health

Financial support: São Paulo Research Foundation  
(FAPESP).

2015-2017

**Master degree  
Science**

♦ **Center of Nuclear Energy in Agriculture  
(CENA/USP), Brazil.**

Thesis: "Stocks and fluxes of carbon and  
nitrogen above- and belowground in fragments  
of the southern Brazilian Atlantic forest".  
Master Scholarship (GM/CNPq).

2016

**Advanced studies  
on Nitrogen Cycling**

♦ **University of Sao Paulo (USP), Brazil.**

♦ **Inter-American Institute for Global Change  
Research (IAI).**

School of Advanced Science on nitrogen  
cycling, environmental sustainability and  
climate change.

Financial support: Sao Paulo Research Foundation  
(FAPESP).

2009-2014

**Bachelor of Science  
Environmental &  
Sanitary Engineering**

♦ **University of the Region of Joinville  
(UNIVILLE), Brazil.**

Thesis: "Diagnosis of anthropogenic pressure  
on the atmosphere in the municipality of  
Joinville, Santa Catarina, Brazil".

♦ **Università degli Studi di Bologna, Italy**  
(2012/2013)

Scholarship Graduate Abroad Sandwich (CNPq).

2014

**Regional  
Development**

♦ **University of the Region of Joinville  
(UNIVILLE), Brazil.**

Financial support: Government of Santa Catarina.

## ADDRESS

Joinville/SC,  
Curitiba/PR,  
Brazil

## PHONE

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## E-MAIL

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## ORCID

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## LinkedIn

[www.linkedin.com/in/jcss-50836839](http://www.linkedin.com/in/jcss-50836839)

## Soft Skills

Ethic  
Critical Thinking  
Communication  
Listening  
Teamwork  
Leadership  
Detail-Oriented  
Time Management  
Problem Solving  
Adaptability  
Proactive

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## Current Position

2023 – ongoing  
**Postdoctoral Researcher**  
Postgraduate Program in  
Environmental Engineering

- **Universidade Federal do Paraná (UFPR)**  
**Research project:** “Inventário de material particulado em municípios com atividades minerais estabelecidas”.  
*A partnership with the Public Ministry of the State of Paraná.*  
Access: <https://rmcqualidadedoar.shinyapps.io/dados/>

## Latest Works

DOS SANTOS-SILVA, J. C. *et al.* A fingerprint of source-specific health risk of PM<sub>2.5</sub>-bound components over a coastal industrial city. **Journal of Hazardous Materials**, (2024). Available at: <<https://doi.org/10.1016/j.scitotenv.2023.162131>>

SILVA, Jéssica Caroline dos Santos. **Avaliação Integrada da Poluição atmosférica e dos riscos socioecológicos na cidade de Joinville/SC**. 2022. Tese (Doutorado em Engenharia de Recursos Hídricos e Ambiental). Universidade Federal do Paraná. Available at: <<https://acervodigital.ufpr.br/handle/1884/81462>>.

DOS SANTOS-SILVA, J. C. *et al.* A new strategy for risk assessment of PM<sub>2.5</sub>-bound elements by considering the influence of wind regimes. **Science of The Total Environment**, (2023). Available at: <https://doi.org/10.1016/j.scitotenv.2023.162131>

[E-BOOK] SILVA, L. V.; SOUZA, A. L. F. ; DOS SANTOS-SILVA, J. C. ; RHODEN, S. A. . Monitoramento de bioaerossóis em estação de tratamento de esgoto. 1. ed. Blumenau: Editora IFC, 2023. | <https://editora.ifc.edu.br/2023/10/24/monitoramento-de-bioaerossóis-em-estacao-de-tratamento-de-esgoto/>

SILVA, Jéssica Caroline dos Santos. **Estoques e fluxos de carbono e nitrogênio acima e abaixo do solo em fragmentos de Floresta Atlântica no sul do Brasil**. 2017. Dissertação (Mestrado em Química na Agricultura e no Ambiente). Universidade de São Paulo (2017). Available at: <<http://doi.org/10.11606/D.64.2017.tde-30112017-101614>>.

## Other Experiences

2012-2013    ♦ *Utilizzo del modello CALPUFF per la valutazione della qualità dell'aria da emissioni di un impianto di processo.*  
**Università degli Studi di Bologna, Italy.**    Scholarship Graduate Abroad Sandwich (CNPq).

2012-2013    ♦ *Short-cut nutrients removal from UASB effluent treating municipal wastewater for decentralized communities.*  
**Università degli Studi di Verona, Italy (Internship).**    Scholarship Graduate Abroad Sandwich (CNPq).

### University of the Region of Joinville (UNIVILLE), Brazil.

- ♦ **Herbarium Joinvillea (JOI).**  
Intern (2011, 2012, 2014)
- ♦ **GHG projects (Bureau Veritas Certification).**  
Audit intern - (2012)
- ♦ **Assessoria Técnico-Científica ao Comitê de Gerenciamento da Bacia Hidrográfica do Rio Cubatão Norte e Cachoeira (CCJ).**  
Volunteer - (2009-2012)
- ♦ **Biodiversity on rocky shore at Babitonga Bay – south of Brazil.**  
Scientific Initiation Project - (2010-2011)

## Additional Skills

### Languages

- Portuguese
- English
- Italian (Intermediate)
- Spanish (Working knowledge)

### Tools & Technologies

- ArcGis and QGis
- R (Programming Language)
- GitHub
- Microsoft Office