

# BEATRIZ SOUZA

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## EDUCATION

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- APR 2023-now    **PhD in Computer Science**  
University of Stuttgart, Germany  
Advisor: Michael Pradel
- OCT 2021-FEB 2023    **Master's in Computer Science**  
Federal University of Pernambuco, Brazil  
Advisor: Marcelo d'Amorim
- MAY 2017-JUNE 2021    **Bachelor's in Computer Science**  
Federal University of Campina Grande, Brazil  
Advisor: Rohit Gheyi
- MAY 2013-SEPT 2016    **High School with a Technical Degree in Informatics**  
Federal Institute of Education, Science and Technology of Paraíba, Brazil  
Advisor: Gustavo Soares Vieira

## EXPERIENCE

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- JULY 2022-DEC 2022    **Research intern** at SOLA, Stuttgart, Germany  
I worked on *LExecutor*, a learning-guided approach for executing arbitrary Python code snippets.
- MAY 2020-FEB 2021    **Software Developer** at LAB ANALYTICS, Campina Grande, Brazil  
I worked on *Tá de Pé?* and *Monitor Cidadão*, which are web applications aiming to identify risks in Brazilian government contracts.
- NOV 2019-OCT 2020    **Research assistant** at UFCG, Campina Grande, Brazil  
I Worked on a sound and lightweight technique, based on theorem proving using Z3, to identify equivalent, duplicate, and subsumed mutations.
- AUG 2018-JULY 2019    **Research assistant** at SPLAB, Campina Grande, Brazil  
I investigated the effectiveness of state-of-the-art tools that automatically generate test cases, such as Randoop and EvoSuite.
- JULY 2016-SEPT 2016    **Web Developer Intern** at PAPAGAIO, João Pessoa, Brazil  
I participated in the development of an e-commerce platform for drug stores.
- AUG 2015-JULY 2016    **Research assistant** at IFPB, Cajazeiras, Brazil  
I worked on *Segundo Mendel*, a mobile application to help high school students to learn genetic concepts, such as Mendel's Laws.

## PUBLICATIONS

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- FSE'23    LExecutor: Learning-Guided Execution.  
**Beatriz Souza** and Michael Pradel. *Symposium on the Foundations of Software Engineering*
- IST'21    Identifying Method-Level Mutation Subsumption Relations using Z3.  
Rohit Gheyi, Márcio Ribeiro, **Beatriz Souza**, Marcio Guimarães, Leo Fernandes, Marcelo d'Amorim, Vander Alves, Leopoldo Teixeira, Baldoino Fonseca. *Elsevier Information and Software Technology*
- SBES'20    A Large Scale Study On the Effectiveness of Manual and Automatic Unit Test Generation.  
**Beatriz Souza** and Patrícia Machado. *Brazilian Symposium on Software Engineering*
- SBES'20    A Lightweight Technique to Identify Equivalent Mutants.  
**Beatriz Souza** and Rohit Gheyi. *Brazilian Symposium on Software Engineering*
- ASE'20    Identifying Mutation Subsumption Relations.  
**Beatriz Souza**. *International Conference on Automated Software Engineering*
- SPLASH'19    Is Mutation Score a Fair Metric?.  
**Beatriz Souza**. *International Conference on Systems, Programming, Languages, and Applications: Software for Humanity*

## AWARDS

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- **Best paper at The Brazilian Symposium on Software Engineering** (SBES'20) for the work *A Large Scale Study On the Effectiveness of Manual and Automatic Unit Test Generation*.
- **First Place at The Undergraduate Research on Software Engineering Competition** (SBES'20) for the work *A Lightweight Technique to Identify Equivalent Mutants*.
- **Third Place at The ACM Student Research Competition** (ASE'20) for the work *Identifying Mutation Subsumption Relations*.
- **Third Place at The ACM Student Research Competition** (SPLASH'19) for the work *Is Mutation Score a Fair Metric?*.

## TEACHING EXPERIENCE

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APR 2023-SEPT 2023	<b>Teaching assistant</b> at SOLA, Stuttgart, Germany Programming Paradigms - I created and graded exercise lists and addressed questions for a class of 80+ students.
MAR 2018-AUG 2018	<b>Teaching assistant</b> at UFCG, Campina Grande, Brazil Mathematical Foundations for Computer Science - I helped professor by grading exercise lists and addressing questions for a class of 46 students.
JULY 2015-DEC 2015	<b>Teaching assistant</b> at IFPB, Cajazeiras, Brazil Competitive Programming - I collaborated in a course to prepare high school and undergraduate students for programming contests using C as programming language.

## VOLUNTEER SERVICE

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- Student volunteer of the ASE 2020 conference.