# Susanna F. de Rezende

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https://derezende.github.io/

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## Current Position

Assistant professor (biträdande universitetslektor) in Algorithms and Complexity Department of Computer Science, LTH, Lund University

### **EDUCATION**

2019 Ph.D. in Computer Science, KTH Royal Institute of Technology, Sweden

2014 M.Sc. in Computer Science, University of São Paulo, Brazil

2011 B.Sc. in Computer Science, University of São Paulo, Brazil

## Positions and Long-Term Visits

- o Assistant Professor, Department of Computer Science, Lund University, Sweden (Dec 2021 )
- Visiting Scholar, Simons Institute for the Theory of Computing, Berkeley CA, USA (Jan-Apr 2023) Program: Meta-complexity
- Postdoc, Institute of Mathematics of the Czech Academy of Sciences, Czechia (Dec 2019 Nov 2021) with grant from the Knut and Alice Wallenberg Foundation and hosted by Pavel Pudlák
- Research Fellow, Simons Institute for the Theory of Computing, Berkeley CA, USA (Jan-May 2021) Program: Satisfiability: Theory, Practice, and Beyond
- Research Fellow, Simons Institute for the Theory of Computing, Berkeley CA, USA (Aug-Dec 2018) Program: Lower Bounds in Computational Complexity

## RESEARCH GRANTS

2025–2029 Wallenberg Academy Fellowship

2022–2026 WASP Academic Doctoral Student Position

2022–2025 VR Research project grant within natural and engineering sciences

2021–2027 ELLIIT BUL recruitment

2019–2021 and 2021–2023 Knut and Alice Wallenberg Postdoctoral Scholarship Program

2021 Simons-Berkeley Research Fellowship

2018 Simons-Berkeley Google Research Fellowship

## RECOGNITION

- Appointed as a Wallenberg Academy Fellow, 2023
- o Simons-Berkeley Research Fellowship for Satisfiability: Theory, Practice, and Beyond, 2021
- Featured as one of the "rising stars" women in theoretical computer science at STOC, 2020
- Stockholm Mathematics Centre Prize for Excellent Doctoral Dissertation, 2019
- o Simons-Berkeley Research Fellowship for Lower Bounds in Computational Complexity, 2018
- o M.Sc. thesis selected among top 10 in CS in Brazil, Brazilian Society of Computation (SBC), 2014
- o Gold Medal at V National Symposium of Scientific Initiation, IMPA, 2010

## TEACHING

Advanced Algorithms (2023 and 2024)

Discrete Structures in Computer Science (2022)

Teacher assistant in: Logic for Computer Science (2015-2016), Data-structure, Algorithms and Complexity (2015-2016), Algorithms and Complexity (2015), Linear programming (2011), Calculus I (2009)

## SELECTED INVITED TALKS

- o Mar 2024 Proof Complexity and Beyond, Oberwolfach, Germany
- o Nov 2023 Oxford-Warwick Complexity Meetings, UK
- o Apr 2023 Satisfiability: Theory, Practice, and Beyond, Simons Institute, Berkeley CA, USA
- o Mar 2023 Computational Complexity of Discrete Problems, Dagstuhl, Germany
- o Jan 2023 Meta-complexity, Simons Institute, Berkeley CA, USA
- o Oct 2022 Theory and Practice of SAT and Combinatorial Solving, Dagstuhl, Germany

- o Jul 2022 Mathematical Approaches to Lower Bounds, ICMS, Edinburgh, UK
- o Jun 2022 Logic Colloquium, Reykjavik, Iceland
- o Jun 2022 Satisfiability: Theory, Practice, and Beyond Reunion, Simons Institute, Berkeley CA, USA
- o Dec 2021 Tel Aviv University theory seminar, Israel
- o Sep 2021 Rigorous Evidence for Information-Computation Trade-offs, Simons Institute, USA
- Mar 2021 50 Years of Satisfiability, Simons Institute, Berkeley CA, USA
- Feb 2021 Oxford-Warwick Complexity Meetings, UK
- o Oct 2020 TCS+ seminar
- o Jun 2020 TCS Women Rising Stars workshop at STOC '20
- o Jan 2020 Proof Complexity, BIRS, Banff, Canada
- o Jul 2019 Algebraic Techniques in Computational Complexity, BIRS, Banff, Canada
- o May 2019 Gödel Lecture special session, ASL North American Annual Meeting, New York, USA

## RECENT INVITED WORKSHOPS

- o Dagstuhl Seminar 25111 Computational Complexity of Discrete Problems, Germany, Mar '25
- o Dagstuhl Seminar 24421 SAT and Interactions, Oct '24
- Proof Complexity and Beyond, Mathematisches Forschungsinstitut Oberwolfach, Germany, Mar '24
- o Dagstuhl Seminar 23111 Computational Complexity of Discrete Problems, Germany, Mar '23
- o Dagstuhl Seminar 22411 Theory and Practice of SAT and Combinatorial Solving, Germany, Oct '22
- o Communication Complexity and Applications III, BIRS, Banff, Canada, Jul '22
- Rigorous Evidence for Information-Computation Trade-offs, Simons Institute-EPFL, Sep '21
- o Dagstuhl Seminar 20061 SAT and Interactions, Germany, Feb '20
- o Proof Complexity, BIRS, Banff, Canada, Jan '20

### Professional Service

## Organization of workshops

- o Co-organizer of Complexity as a Kaleidoscope School for PhD students, 2025
- o Co-organizer of Proof Complexity Beyond Propositional Logic Special Session at ASL, March 2023
- Co-organizer of the Proof Complexity Workshop at FOCS '21, February 2022
- Local organizer of Future Digileaders, Stockholm, November 2019
- Main organizer of the Rising Stars at KTH workshop, April 2019
- Main organizer of career-development seminar and workshop at KTH, April 2017

### Program committees

- ACM Symposium on Theory of Computing (STOC) 2025
- o Computational Complexity Conference (CCC) 2023
- ACM Symposium on Theory of Computing (STOC) 2023
- FLoC proof complexity workshop 2022
- IEEE Foundation of Computer Science (FOCS) 2021
- International Joint Conference on Artificial Intelligence (IJCAI) 2021
- Computer Science in Russia (CSR) 2021

#### Other

- Member of Board of Trustees for Computational Complexity Foundation Inc. (CCF), 2023-2026
- Editorial board for the Mathematical Logic Quarterly Journal, 2023-2025
- Guest editor for Special Issue of Theory of Computing Systems on selected papers from CSR '21
- o Journal refereeing for SICOMP, Algorithmica, Information and Computation, Journal of Graph Theory, ACM Transactions on Computation Theory, Discrete Applied Mathematics
- Reviewer for conferences: FOCS, STOC, CCC, MFCS, CSR, SAT, STACS, ESA, LATIN

### OTHER ACTIVITIES

- Invited to speak at closing ceremony of the European Girls' Olympiad in Informatics (EGOI) 2023
- o Co-initiator and committee member of Women PhD Candidates (WOP) at KTH network, 2016–2019

## Research Papers