BERNARDO SUBERCASEAUX

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EDUCATION

Carnegie Mellon University, PA, United States   August 2021 -
First year PhD student, advised by Anupam Gupta and Marijn Heule.

University of Chile, Chile   March 2014 - December 2020
Master in Computer Science (GPA 7.0/7.0), under the supervision of Pablo Barceló and Jorge Pérez.
Bachelor in Engineering and Computer Science (GPA 7.0/7.0), 2019.

CentraleSupélec (ex École Centrale Paris), France   September 2016 - June 2018
Master of Engineering - Computer Science (GPA 3.58/4.00)
Received the Eiffel Excellence Scholarship from the French government.

Head TA : *Complexity and Computability*, *Design and Analysis of Algorithms*, *Discrete Math*, *Theory of Computation*, *Introduction to Programming*, *Algorithms and Data Structures*, *Databases*, *Programming Languages*, and *Workshop for Competitive Programming*.

PUBLICATIONS

· **NeurIPS2021 (Spotlight)**, *"Foundations of Symbolic Languages for Model Interpretability"*. with M. Arenas, D. Baez, P. Barceló, and J. Pérez.

· **NeurIPS2020**, *"Model Interpretability through the lens of Computational Complexity"*. with P. Barceló, M. Monet and J. Pérez.

· **AFCI@NeurIPS2020**, *"Foundations of Languages for Interpretability and Bias Detection"*. with P. Barceló and J. Pérez.

· **ICDT2020**, *"On the Expressiveness of LARA: A Unified Language for Linear and Relational Algebra"*. with P. Barceló, N. Higuera and J.Pérez.

· **FUN2021**, *"The Computational Complexity of Evil Hangman"*. with J. Barbay.

· **DEEM2019** & **AMW2019**, *"Expressiveness of Matrix and Tensor Query Languages in terms of ML Operators"*. with P. Barceló, N. Higuera and J.Pérez.

· **IOI Journal 2016**, *"Wavelet Trees for Competitive Programming"*. with R. Castro, N. Lehman and J. Pérez.

SOFTWARE ENGINEERING EXPERIENCE

— **Facebook**, CA, Software Engineering Intern   (July 2019 - September 2019)
— **The Dog Company**, Part time Software Engineer   (March 2018 - December 2018)
— **khipu**, Software Engineering Intern   (July 2017 - September 2017)

COMPETITIVE PROGRAMMING EXPERIENCE

— **1st place** in Chile at the ACM-ICPC South American finals 2018.
— **29th place** worldwide, out of more than 4000 teams in the IEEEXtreme 12.0
— **1st place** in the Chilean Programming Torunament (TCP, ACM - ICPC) 2017, 2018

SKILLS

Programming Skills   C++, Java, Python, Racket, SQL, Javascript (NodeJS, React)
Languages   English (113/120 TOEFL iBT 2020), French, Spanish