Gabriel Morete de Azevedo

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Education

Cornell University, Ithaca, United States — *Aug 2024 - Present*
PhD in Operations Research
Advisor: Paul Gölz

University of São Paulo, São Paulo, Brazil — *Aug 2021 - May 2024*
Master Program in Computer Science
Advisor: Yoshiko Wakabayashi

University of São Paulo, São Paulo, Brazil — *Aug 2017 - Jul 2021*
Bachelor's in Molecular Sciences — GPA: 9.1/10.0
The Molecular Sciences Course is a research-focused multidisciplinary program comprising two years of coursework in Computer Science, Mathematics, Physics, Biology, and Chemistry and two years of specialization. I specialized in Computer Science.

Supervised Projects

Cornell University — *Jan 2026 – May 2026*
*ORIE 4999 - Undergraduate Research Project (*Co-supervised with Paul Gölz*)*
Supervised four undergraduate researchers, Ajay Bagaria, Courtney Brecher, Jake Frappier, and Ivan Marjanovic, in fine-tuning state-of-the-art fair sortition algorithms used in open-source platforms, including panelot.org and the Sortition Foundation's algorithm library.

Publications

- **Gabriel de Azevedo** and Ulysse Hennebelle. Adaptivity Gaps for Influence Maximization: Percolation and Depletion. Working Paper
- **Gabriel de Azevedo** and Ulysse Hennebelle. Condorcet-Winning Sets and Peer Selection in Planar Metric Elections. Working Paper
- **Gabriel de Azevedo** and Paul Gölz. *Maximally Random Sortition*. EC 2026.

Extended Abstracts

- **Gabriel de Azevedo** and Yoshiko Wakabayashi. *An Efficient Algorithm to Add Up-Links to a Rooted Tree to Obtain a Minimum-Cost 2-Connected Graph*. In Proceedings of the 9th Theory of Computation Meeting (ETC), 2024. **Best Paper Award**.
- **Gabriel de Azevedo** and Carlos E. Ferreira. *New Reduction Tests for the Prize-Collecting Steiner Tree Problem*. In Proceedings of the 6th Theory of Computation Meeting (ETC), 2021.

Invited Talks

- Stanford Deliberative Democracy Lab. Maximally Random Sortition. November 2026
- Informs Annual Meeting. Maximally Random Sortition. November 2026

Teaching Experience

Was teaching assistant for the following courses:

- Optimized Democracy, Cornell University — *Aug 2025 – Dec 2026*
- Optimization I - Linear Programming, Cornell University — *Aug 2025 – Dec 2025*
- Multivariable Calculus for Engineers, Cornell University — *Jan 2025 – May 2025*
- Approximation Algorithms (Graduate, co-lecturer), University of São Paulo — *Aug 2023 – Dec 2023*
- Introduction to Graph Theory, University of São Paulo — *Mar 2022 – Jul 2022*
- Introduction to Computer Science, University of São Paulo — *Aug 2022 – Dec 2022*

Awards and Honors

- 2024: ICPC World Finalist, 46° ICPC World Finals
- 2023: São Paulo Research Foundation, scholarship for international studies, grant 22/15632-1
- 2021: São Paulo Research Foundation, masters research fellowship, grant 21/12599-0
- 2020: São Paulo Research Foundation, undergraduate research fellowship, 20/10341-3
- 2020: University of São Paulo Innovation Agency entrepreneurship travel scholarship.
- 2019: São Paulo Research Foundation, undergraduate research fellowship, grant 19/11702-2

Competitive Programming

In this activity, the competitor improves teamwork skills, learns to use and implement complex algorithms and data structures, and writes code quickly and accurately in C++ and Python. My achievements include:

- 46° International Collegiate Programming Contest World Finals, rank: 76/124 (top Brazilian team)
- South American Finals: 2021 Silver Medal, rank: 5/250+, 2020 Bronze Medal rank: 8/300+;
- ICPC subregional, Brazil: 2021: 5/500+, 2020: 11/700+, 2019: 24/650+;

Served as coach/president of the University of São Paulo's competitive programming group (MaratonUSP) from 2022 to 2024. Responsibilities included giving lectures, organizing training camps (ICPC and IOI), preparing competitions, and securing funding for the teams. As a coach, I earned two silver medals and one gold medal at the ICPC South American Finals and the ICPC Latin American Championship. Established affirmative actions to encourage female participation, resulting in the qualification of the first all-female team to the South American Finals. Invited by the Brazilian ICPC committee to teach at the 2023 Brazilian ICPC Summer School, the largest event of its kind in Latin America. Lectured on algorithms for more than 150 students from several countries in South America. Co-organized a preparatory course for the students representing Brazil at IOI 2022.

Experience

University of Waterloo *Feb 2023 – Jun 2023*
Research Intern *Waterloo, On, Canada*
Worked under the supervision of Prof. Joseph Cheriyan on approximation algorithms for survivable network design problems from a theoretical and computational standpoint. Developed novel and fast algorithms using linear optimization and polyhedral techniques. Implemented state-of-the-art algorithms using C++, Gurobi, and parallelization using OpenMP.

Service

I served as a sub-reviewer for: AAAI 2027

At Cornell-ORIE, I served as the Operations Research Graduate Students association from 2025-2026 and PhD Colloquium organizer from 2025-2027.

Summer Schools and Events

- Informs Annual Meeting 2026. San Francisco, USA. (**Speaker**)
- Young Researchers Workshop, 2026, Ithaca, USA. (**Poster presentation**)
- Economics and Computation 2026. Rome, Italy. (**Speaker**)
- AI-Score, 2026, Chicago, USA
- NYC Operations Day, 2026, New York, USA. (**Organizer**)
- Young Researchers Workshop, 2025, Ithaca, USA. (**Poster presentation**)
- Democracy R&D, 2025, Brussels, Belgium. (**Speaker**)
- YinzOR, 2025, Pittsburgh, USA. (**Poster presentation**)
- Summer School on Linear Program Solvers, Atlanta, USA.
- NYC Operations Day, 2025, New York, USA. (**Poster presentation**)
- Fulkerson 100, 2025, Ithaca, USA.
- First Brazilian School of Combinatorics, 2023, Juquehy, Brazil. (**Poster presentation**)
- Brazilian ICPC Summer School, 2023, Campinas, Brazil. (**Instructor**)
- Modern Trends in Combinatorial Optimization, 2022, Lausanne, Switzerland.
- V São Paulo Workshop on optimization, combinatorics and algorithms, 2022, São Paulo, Brazil.
- XVII Escuela de Verano en Matemáticas Discretas, 2022, Valparaíso, Chile. (Online)
- School on Modern Directions in Discrete Optimization, 2021, Bonn, Germany. (Online)
- 14th Latin American Theoretical Informatics Symposium, 2021, São Paulo, Brazil. (Online)
- XI Latin and American Algorithms, Graphs and Optimization Symposium, 2021, São Paulo, Brazil. (Online)
- XLI Congress of the Brazilian Computer Society, 2021, Florianópolis, Brazil. (Online)
- Combinatorial Optimization at Work, 2020, Berlin, Germany. (Online)
- First workshop in mathematics and industry, IMPA, 2020, Rio de Janeiro, Brazil