

Eric Brandwein

Computer Scientist

Teaching

- August 2024 – **University Teaching Assistant (Jefe de Trabajos Prácticos)**, *Algoritmos y Estructuras de Datos III*, Departamento de Computación, Facultad de Ciencias Exactas y Naturales, UBA, Buenos Aires, Argentina.
February 2025 – Present
- August 2024 – **University Teaching Assistant**, *Algoritmos y Estructura de Datos*, Departamento de Ingeniería, Universidad de San Andrés, Buenos Aires, Argentina.
February 2025
- October 2023 – **University Teaching Assistant (Ayudante de 1ra)**, *Algoritmos y Estructuras de Datos III*, Departamento de Computación, Facultad de Ciencias Exactas y Naturales, UBA, Buenos Aires, Argentina.
August 2024
- February 2019 – **University Teaching Assistant (Ayudante de 2da)**, *Algoritmos y Estructuras de Datos I*, Departamento de Computación, Facultad de Ciencias Exactas y Naturales, UBA, Buenos Aires, Argentina.
February 2020

Other work experience

- January 2022 – **Software Engineer**, *Wildlife Studios*, Buenos Aires, Argentina.
July 2022
- August 2021 – **Software Engineering MTS**, *Mulesoft*, Buenos Aires, Argentina.
December 2021
- March 2021 – **Software Engineer II**, *Medallia*, Buenos Aires, Argentina.
August 2021
- March 2015 – **Software Engineer**, *Mercadolibre*, Buenos Aires, Argentina.
March 2017

Studies

- 2023 – **PhD in Computer Science**, *Universidad de Buenos Aires*, Buenos Aires, Argentina.
Present Advisors: Flavia Bonomo and Ignasi Sau. Topic: Graph thinness and related parameters.
- 2015 – 2022 **Licenciado en Ciencias de la Computación**, *Universidad de Buenos Aires*, Buenos Aires, Argentina.
Marks average of 8.9 out of 10. Presented a master's thesis on an algorithm to compute the thinness of a tree graph in $\mathcal{O}(n \cdot \log(n))$ time. The same thesis includes results on the thinness of other graph classes, such as grid and crown graphs.
- 2010 – 2014 **Bachelor with orientation on Information Technology**, *ORT High School*, Buenos Aires, Argentina.

Publications

Preprints

- *Computing parameters that generalize interval graphs using restricted modular partitions*. Flavia Bonomo-Braberman, Eric Brandwein, Ignasi Sau. Sent for review.

In conferences

- *Thinness 2 condicionada a órdenes de co-bipartición*. Ayelén Dinkel, Flavia Bonomo-Braberman, Eric Brandwein (2025). JAIIO, Jornadas Argentinas De Informática, 11(14), 98-111. <https://revistas.unlp.edu.ar/JAIIO/article/view/19450>.
- *On the Thinness of Trees*. Flavia Bonomo-Braberman, Eric Brandwein, Carolina Lucía Gonzalez, Agustín Sansone (2022). Combinatorial Optimization. ISCO 2022. Lecture Notes in Computer Science, vol 13526. Springer, Cham. https://doi.org/10.1007/978-3-031-18530-4_14.

In journals

- *On the thinness of trees*. Flavia Bonomo-Braberman, Eric Brandwein, Carolina Lucía Gonzalez, Agustín Sansone (2025), Discrete Applied Mathematics, Volume 365, Pages 39-60, ISSN 0166-218X, <https://doi.org/10.1016/j.dam.2024.12.027>.
- *Thinness and its variations on some graph families and coloring graphs of bounded thinness*. Flavia Bonomo-Braberman, Eric Brandwein, Fabiano de S. Oliveira, Moysés S. Sampaio Jr., Agustín Sansone, Jayme Luiz Szwarcfiter (2024). RAIRO-Operations Research, 58(2), 1681-1702. <https://doi.org/10.1051/ro/2024033>.

Talks

- *Kernelization dichotomies for hitting minors under structural parameterizations*. Séminaire ALGCo, LIRMM, Montpellier, France, October 2025, joint work with Marin Bougeret and Ignasi Sau.
- *Parameterized algorithms for thinness via the cluster module number*. 11th Latin American Workshop on Cliques in Graphs, Ceará, Brazil, October 2024, joint work with Flavia Bonomo and Ignasi Sau.
- *Parameterized algorithms for thinness via the cluster module number*. Workshop SINFIN, Ciudad Autónoma de Buenos Aires, Argentina, March 2024, joint work with Flavia Bonomo and Ignasi Sau.

Students

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| Ezequiel Maidanik | Thesis supervisor for the degree of Licenciado en Ciencias de la Computación, Departamento de Computación, Universidad de Buenos Aires, Buenos Aires, Argentina. In progress. |
| Bárbara Rivero | Thesis supervisor for the degree of Licenciada en Ciencias de la Computación, Departamento de Computación, Universidad de Buenos Aires, Buenos Aires, Argentina. In progress. |

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| Manuela Martínez | Thesis co-supervisor for the degree of Licenciada en Ciencias de la Computación, Departamento de Computación, Universidad de Buenos Aires, Buenos Aires, Argentina. In progress. |
| Manuel Robert | Extra-official thesis co-supervisor for the degree of Licenciado en Matemática, Departamento de Matemática, Universidad de Buenos Aires, Buenos Aires, Argentina. Defended on November 2025. |
| Ayelén Dinkel | Thesis co-supervisor for the degree of Licenciada en Ciencias de Datos, Departamento de Computación, Universidad de Buenos Aires, Buenos Aires, Argentina. Defended on December 2024. |

Article Refereeing

Reviewer for LAGOS 2025, ISAAC 2024, and IPEC 2024.

Committees

Organizing Committee member for LAGOS 2025.

Grants and Scholarships

- **Research visit**, covering accommodation and meals. LIRMM, Montpellier, France, October 2025.
- **+Viajes 2024**, covering travel expenses to Ceará, Brazil. Universidad de Buenos Aires, Argentina, 2024.
- **Research visit**, covering accommodation and meals. LIRMM, Montpellier, France, August 2024.
- **PhD Scholarship**. CONICET, Argentina, 2024 - 2029, PIP 11220200100084CO.
- **PhD Scholarship**. UBACyT, Argentina, 2023 - 2024, 20220230100009BA.

Languages

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| Spanish | Native | <i>Born and currently living in Argentina</i> |
| English | Fluent | <i>CAE, University of Cambridge</i> |
| Italian | Good command | <i>Trilingual Elementary School, and Italian family</i> |
| French | Basic | <i>6-month course with a native French professor</i> |

Other certificates

- Member of the team placing third on the 2019 and 2020 Argentinian Programming Tournaments (TAP).
- A total of 11 medals and recognitions in the National Argentinian Olympiads of Informatics (OIA) and Mathematics (OMA), including national Gold Medal at 14 years old.
- Cambridge Certificate of Advanced English (CAE).