CURRICULUM VITAE

MARIO ROMÁN

1. Background

Doctoral student at *Tallinn University of Technology* under the supervision of Paweł Sobociński. MSc. in Mathematics and Computer Science at the *University of Oxford* (2019). Two simultaneous and separate Bachelor Degrees, one in Mathematics and one in Computer Engineering, at the *University of Granada* (2018).

2. Publications

1. **Mario Román**. "Promonads and String Diagrams for Effectful Categories". In: *Applied Category Theory Conference*. ACT '22. Glasgow, United Kingdom, 2022. DOI: 10.48550/arXiv.2205.07664. arXiv: 2205.07664. URL: https://doi.org/10.48550/arXiv.2205.07664

2. Elena Di Lavore and **Mario Román**. "Evidential Decision Theory via Partial Markov Categories". In: *To be presented at the 38th Annual ACM/IEEE Symposium on Logic in Computer Science*. LICS '23. 2023. DOI: 10.48550/arXiv.2301.12989. arXiv: 2301.12989. URL: https://doi.org/10.48550/arXiv.2301.12989

3. Elena Di Lavore, Giovanni de Felice, and **Mario Román**. "Monoidal Streams for Dataflow Programming". In: *Proceedings of the 37th Annual ACM/IEEE Symposium on Logic in Computer Science*. LICS '22. Haifa, Israel: Association for Computing Machinery, 2022. ISBN: 9781450393515. DOI: 10.1145/3531130.3533365

4. Elena Di Lavore, Alessandro Gianola, **Mario Román**, Nicoletta Sabadini, and Paweł Sobociński. "Span(Graph): a Canonical Feedback Algebra of Open Transition Systems". In: *Software and Systems Modeling* 22 (2023), pp. 495–520. DOI: 10.1007/s10270-023-01092-7. arXiv: 2010.10069 [math.CT]

5. Elena Di Lavore, Alessandro Gianola, **Mario Román**, Nicoletta Sabadini, and Pawel Sobocinski. "A Canonical Algebra of Open Transition Systems". In: *Formal Aspects of Component Software - 17th International Conference, FACS 2021, Virtual Event, October 28-29, 2021, Proceedings*. Ed. by Gwen Salaün and Anton Wijs. Vol. 13077. Lecture Notes in Computer Science. Springer, 2021, pp. 63–81.

DOI: `10.1007/978-3-030-90636-8\_4`. URL: `https://doi.org/10.1007/978-3-030-90636-8%5C_4`

6. Guillaume Boisseau, Chad Nester, and **Mario Román**. "Cornering Optics". In: *Applied Category Theory Conference*. ACT '22. Glasgow, United Kingdom, 2022. DOI: `10.48550/arXiv.2205.00842`. arXiv: `2205.00842`. URL: `https://doi.org/10.48550/arXiv.2205.00842`

7. **Mario Román**. "Open Diagrams via Coend Calculus". In: *Applied Category Theory Conference*. Vol. 333. ACT '20. Boston, USA: Open Publishing Association, Feb. 2021, pp. 65–78. DOI: `10.4204/eptcs.333.5`. URL: `http://dx.doi.org/10.4204/EPTCS.333.5`

8. Bryce Clarke, Derek Elkins, Jeremy Gibbons, Fosco Loregiàn, Bartosz Milewski, Emily Pillmore, and **Mario Román**. "Profunctor optics, a categorical update". In: *Compositionality, to appear* (2020). arXiv: `2001.07488`. URL: `https://arxiv.org/abs/2001.07488`

3. Awards

Kleene Award to the Best Student Paper and *Selected as Distinghised Paper* at LiCS'23 for "Monoidal Streams for Dataflow Programming", joint with Elena Di Lavore and Giovanni de Felice.

Spanish Royal Mathematical Society (RSME-UGR) prize to the best Mathematics Bachelor Thesis at the University of Granada, 2018. "Category Theory and Lambda Calculus", supervised by Pedro García-Sánchez.

Undergraduate Research Fellowship at the Department of Algebra of the University of Granada, for the Haskell development of the software under the following article. **Mario Román**. "Mikrokosmos: an educational lambda calculus interpreter". In: *Journal of Open Source Education* 2.16 (2019), p. 29. DOI: `10.21105/jose.00029`. URL: `https://doi.org/10.21105/jose.00029`.

International Mathematical Olympiad (IMO) Honorary Mention, economic support for preparation from the Spanish Royal Mathematical Society (RSME, 2012).

4. Community

Reviewing. Executive editor at Compositionality. Conference reviewer at LiCS, CONCUR, FoSSaCS, CALCO, and ACT. Journal reviewer at LMCS and Compositionality.

Program committee member at ACT 2022 and ACT 2023.

Teaching. Teaching assistant for Functional Programming (IT0212) and Category Theory (ITI9200).

Misc. Maintainer of Haskell libraries (`vitrea` and `mikrokosmos` at Hackage); also fluent in Agda, C++, English, Italian and Spanish.

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